

CSE Service Manager

Administrator's Reference Manual V4.10

June 2012

This new release of Service Manager introduces the new Asset Manager and Asset and Room Booking systems. Whilst these are effectively separate modules, the systems are integrated and there are areas where there is some considerable crossover and common functionality that is shared across the platforms.



For instance, a service request can now directly link to an asset. If there is a workstation problem, the service request can now point directly to the asset using the asset database. This allows the service responders to quickly pull up all the data relating to the asset whilst dealing with the problem.

Also when somebody books a room, they will be able to see if there are any issues with the equipment in the room before making the booking. So if the projector is broken, they can see that and perhaps decide to book another room with a projector that is working.

Service Manager Enhancements

We have taken the opportunity to make a number of improvements, making Service Manager even more adaptable to the requirements of our customers.

User Management

A number of customers requested a feature that allowed much finer control over the service management functions available to end users. User management now allows you to manage your various user types in much greater detail. Individual features can now be switched on or off based on group or individual user accounts.

Notifications

One of the strengths of Service Manager has been the customisable notifications (emails) that it can send out informing users of the system about the status of service requests. The system has been significantly overhauled, now manages rule-based notifications for the asset and room booking systems.

Contact Management

We have improved how contacts are managed, primarily because Asset Manager requires a more sophisticated system.

Table of Contents

Table of Contents.....	2
Chapter 1	5
Admin Portal	5
Technician Portal.....	6
End User Portal	6
CSE Service Manager Manuals	7
How to use this Manual	7
Terminology.....	7
Information and Warnings.....	9
Other Important Information.....	10
Chapter 2 Service Manager Admin Portal	11
Screen Size	11
User Interface Primer	12
Dashboard primer	15
Dashboard Frames	16
Dashboard Charts.....	18
Active Service Requests.....	18
Active Service Requests by Category	20
Active Service Request by Priority	21
Request by Status.....	21
Total Requests by Month	22
Other Dashboard Controls.....	22
Service Manager Admin Preferences Menu	24
Preferences/Localisation.....	24
Preferences - User Management.....	25
Adding Users/Groups.....	25
Granular Access Control.....	27
User General Settings	31
User History.....	31
Portals	32
Portal Copy and Paste	35
Preferences\Service Manager Settings	36
Preferences\Service Manager Settings\General	36
Preferences\Service Manager Settings\Categories.....	38
Adding a new Category	39
Adding a new Sub Category	39
Adding Third Categories	39
Other Category Controls	40
Category Visibility and Access Control	41
Preferences \ Service Manager Settings\Priority	43
Why add to the priorities list?	43
Preferences\Service Manager Settings\Custom Fields	44
Preferences\Service Manager Settings\Routing	46
Creating a new Routing Rule	48
Preferences\Service Manager Settings\Timers	48
Timer DB Variables	50
Logic Operators.....	50
Creating your own timer using the Logic Builder	51
Timer Restrictions	52
Viewing and Interacting with Timers	53
Further Custom Timer Example	53
Preferences\Service Manager Settings\Service Hours.....	54

Preferences\Notifications	55
Service Desk Notification Rules	56
Building Service Desk Notification Rules	57
Rule Type	57
Name	57
Trigger Criteria	57
Applies To	57
Template	57
Notification Management	57
Notify Users	58
Is Enabled	58
Service Desk Triggers	58
Notification Templates	59
System Mail Templates	61
User Defined Notification Templates	64
Preferences\SLA	65
Getting Started with SLAs	66
Escalation Rules	69
Creating New SLAs	70
SLA Routing Rules	78
Creating a new Routing Rule	79
Routing Rules Hierarchy	81
Managing SLAs	82
SLA Escalation Rule – Editing	83
Preferences>Edit News	84
Adding a News Article	84
Toolbar Controls	85
Text Formatting Controls	91
Spelling Checker	91
Editing an Existing News Article	91
Purging Expired News	92
Preferences\Download	92
Preferences\Knowledge Base	98
KB Article Controls	100
KB Article Table	102
Preferences\Messaging\Outgoing Emails	103
Preferences\Messaging\Inbound Emails	105
Inbound Email Principle	105
Inbound Email Polling	106
Setting up inbound Email from an Exchange Server	106
Testing Incoming Email	110
E-Mail Addresses	111
Chapter 3 Service Manager Reporting	112
Report Console	112
Report Types	113
Custom Reports	119
Scheduled Reports	125
SLA Measurements and Reporting	127

Chapter 4 Service Manager Menus.....	128
Viewing and Managing your Service Requests	128
SR Table Sorting	128
SR Table Column Order.....	129
SR Column Chooser	129
SR Column Filters	130
SR Group Headers	130
Exporting Your Service Request Tables.....	131
Interacting with Service Requests	131
Service Request Notes	132
Service Request Attachments	133
Service Request Activities	133
Service Request Solution.....	134
Service Request Assets.....	134
Changing Service Request Data	135
Changing the Request User	135
Changing the Subject	136
Changing the Status	136
Changing the Priority	136
Keeping Track of your Requests	137
Service Request History.....	137
Service Request Notifications	138
Service Request Timers	138
Appendix A - Menu Structure	140
Appendix B - Database Tags	Error! Bookmark not defined.

Chapter 1

Introduction

CSE Service Manager provides the framework for an effective school-wide ICT support desk and reporting system. It is designed to meet the needs of schools in implementing a FITS-style ICT helpdesk and incident and problem management functions, as well as providing tools to analyse and report on issues that have been raised.

The system utilises the very latest web-based technologies to deliver a web-based school-wide ICT service desk.

The underlying data within Service Manager is handled by an SQL database engine, which can either be MySQL or MSSQL Express based. This ensures that the Service Manager database is easily maintained and is fully capable of being extended in the future.

Service Manager provides three portals:

Admin Portal

The Service Manager Admin Portal manages the service desk and includes:

User Management

This is where technicians and users are managed. The system is completely integrated with the MS Active Directory, so existing user accounts can simply be assigned to the relevant Service Manager group (Administrators/Technicians or Users).

Service Manager Settings

This is where the main Service Manager configuration is handled. Here you can add your own call request categories, set priority levels, add your own custom data fields, maintain Service Level Agreements (SLAs), configure default technician routing, and setup your notification system.

Asset Manager Settings

This is where the main Asset Manager configuration is handled. This is documented in separate documentation.

Reports

This allows you to generate a wide range of reports detailing all aspects of your service desk operations. Reports can simply include data, or incorporate a wide range of graphic representations of your data.

Edit News

Allows you to create and maintain an up-to-date service news page.

Downloads

Allows you to manage and maintain a set of files that Service Manager users can download. This can include files that everyday service desk users might need access to, such as tools to remove viruses, on-line documentation packs, and the Service Manager End User manual.

Knowledge Base

This is where you can publish details of and resolutions to common problems.

Technician Portal

The Technician Portal is where Service Manager responders (technicians) can see all service requests that have been routed to them individually. The Service Manager administrator can automatically configure rules that forward specific categories of calls directly to the technician best suited to resolve the issue.

On the other hand, calls can also be routed manually by being assigned to an individual technician by the administrator.

In addition to being able to see outstanding service requests that have been allocated, technicians can also raise new requests either for themselves or on behalf of users. This is useful in the situation where service requests are made by phone.

Technicians also have access to the Knowledge Base and the Download section.

The Technician Portal is covered in more detail in a separate manual.

End User Portal

The User Portal is where end users can raise support requests and where they can monitor the progress of their requests. In addition they can access the download section and knowledge base.

The User Portal is covered in more detail in a separate manual.

CSE Service Manager Manuals

Service Manager documentation comprises four different manuals, documenting the use of the system for the three types of user who have access to the service desk.

The *Administrators Reference Manual* describes the setup, common configuration and day-to-day management tasks of the Service Manager system.

The *Service Manager Setup Guide* takes you through the steps needed to build your own service desk system. It provides a step-by-step guide to configuring the system to provide a simple service desk which can then be tailored to meet more sophisticated requirements

The *Service Manager Technicians Guide* describes the processes relevant to your technicians in their day-to-day interactions with the system.

The *End-user Guide* is rather generic in nature, since you have a great deal of control over what functions are available to your end users, you may want to consider writing your own user documentation for your tailored implementation. This document is available in Microsoft Word format so you can use it as a template to produce your own specific manual.

You can publish any documentation on-line using the Knowledge Base features, or by placing the documents in the download area

Asset Manager and the Room and Asset Booking System have their own documentation.

How to use this Manual

This manual is intended to help network administrators manage and maintain CSE Service Manager. It only describes the additional functionality provided by the Admin Portal. You should read both the End-User and Technician Portal guides as these include additional information required to run the system.

Terminology

Computer – a physical computer in your network.

CSV File – A comma separated variable (CSV) file contains a list of items with a new item on each line. The properties of each item are separated by commas. The first line in the file should contain the name of each property separated by commas.

Folder Item – A folder item is an item that can be found in a folder, e.g. files, types of files (identified by their extension – e.g. ‘.doc’), and folders.

Dropdown List – this term is used to describe an item in a window which when you click it, a list of items appears, allowing you to select one item from the list. See below:



Scripts – A script is a sequence of computer instructions which are used to perform certain functions.

Station – A station is a computer in your network.

Text box – this term is used to describe an item in a window which you can type data into. See below:



User – A user is someone who uses one or more computer in your network. Users can belong to one or more different groups.

Workstation – a physical computer in your network.

Share - a **shared resource** or **network share** is a device or piece of information on a computer that can be remotely accessed from another computer

ACL - Access Control List (ACL) is a list of permissions attached to an object. An ACL is normally made up of one or more ACE's.

ACE – Access Control Entry is a way of specifying individual permissions to access an object, such as the contents of a folder.

UNC – Universal Naming Convention – a method of specifying paths to reference network shared resources.

Service Manager - Service Manager (SM) is the generic name for the whole system.

Service Desk - Service Desk (SD) is the system that manages and maintains the Service Requests. It is where you enter Service Requests and where the user can track the progress of their outstanding requests. Optionally you can allow access to the Knowledge base and Downloads sections.

Service Requester - Any authorised user of the Service Desk can be a Service Requestor and can enter service requests into the system. They can also view their own service requests and to edit and modify them.

By definition all users of Service Manager can be a *Service Requester* (Admin/Tech & User).

Service Responder - These are Service Manager Administrators and Technicians. These individuals have the responsibility of resolving any *Service Requests* that have been allocated to them.

Service Request - Any authorised user of the Service Manager can raise a Service Request.

By definition all users of the Service Manager can raise *Service Requests* (Admin/Tech & User).

Service Manager Administrators – These are the 'owners' of the Service Manager system and responsible for the configuration and day-to-day running of the whole system.

Service Manager Technician - Service Manager Technicians are the main *Service Responders*. They manage and maintain their own allocated Service Requests making sure that they meet laid down *Service Level Agreements* .

Service Manager Users - These users can raise *Service Requests*, which are then forwarded on to *Service Responders* for action and eventual resolution.

Service Level Agreement - The SLA will typically include target times for response and eventual resolution of a *Service Request*.

The Service Manager system will track *Service Requests* against the targets set by the SLA assigned to it. This provides key management data in terms of measuring the Service Desk performance against the SLA targets set.

Service Request Categories - When raising a *Service Request*, the requestor needs to specify a Service Request Category, as this defines the nature of the request. For instance, that the request is about a software issue or a piece of hardware. The purpose is to aid the classification of requests and forwarded to the right support technician.

Knowledge Base - The Knowledge Base is a database that all users can access. This documents known issues and provides answers to common problems. The Service Desk Administrator and Technicians can add to this database.

Custom Timer - The Service Manager has up to four user definable timers. Sophisticated logic rules determine when each timer starts or stops.

Information and Warnings

When you see the *information* symbol:



There will be a description beneath that may clarify something, or provide some advice that may be useful to you, or give more advanced information on a topic.

When you see the *warning* symbol:



There will be some important information below which may help you avoid problems, or warn you of something that may happen under certain circumstances.



We use this symbol to highlight areas where there is cross-over between Service Manager and the Asset and Room booking systems.



Tip – an idea to help you configure and use the features of Service Manager

Greyed Out Text

Whenever you come across greyed out text, this indicates a control button.

Text Underlined

This indicates a link to click.

Other Important Information

The CSE Service Manager is completely integrated with Microsoft's Active Directory.

- You must have a network login in order to use the Service Manager.
- You must have Microsoft .Net 4.0 and Silverlight™ 5.x Installed.
- Any browser being used must be capable of running Microsoft Silverlight 5™.

Chapter 2

Service Manager Admin Portal

The Service Manager is designed to be fully customised in order to meet the requirements of your establishment, enabling you to create and run an efficient helpdesk.

In its simplest form it provides a mechanism by which users can report issues to the ICT support staff. The *Service Requests* are then passed on to the relevant support person for resolution. This can be accomplished by the *Service Manager Administrator* screening all Service Requests manually, or by automating the process by routing specific *Service Request Categories* to named *Service Responders* (Technicians).

However, the demands of a busy and active service desk must offer flexibility in terms of the way it is set up. It has to be capable of meeting the requirements of your establishment. This flexibility extends to being able to configure *Service Request Categories* that fall outside the bounds of a normal ICT support function. For instance you could extend the service categories to include requests that are automatically assigned to the school caretakers, cleaners, and other ancillary support staff.

To improve efficiency, we can automate many processes. For instance when a *Service Request* is raised under a specific category, such as a problem with an overhead projector, the *Service Request* can be automatically routed to the *Service Responder* (technician) best suited to resolving the issue.

Service Requests can also be automatically assigned to specific *Service Level Agreements*. The SLA specifies what happens when a call remains unresolved and needs to be escalated.

The system has multi-level notification features that enable you to send service desk requestors and responder's emails whenever a *Service Request* has been raised, modified, or closed. The notification system will support instant messaging and in future be able to generate and send SMS text messages.

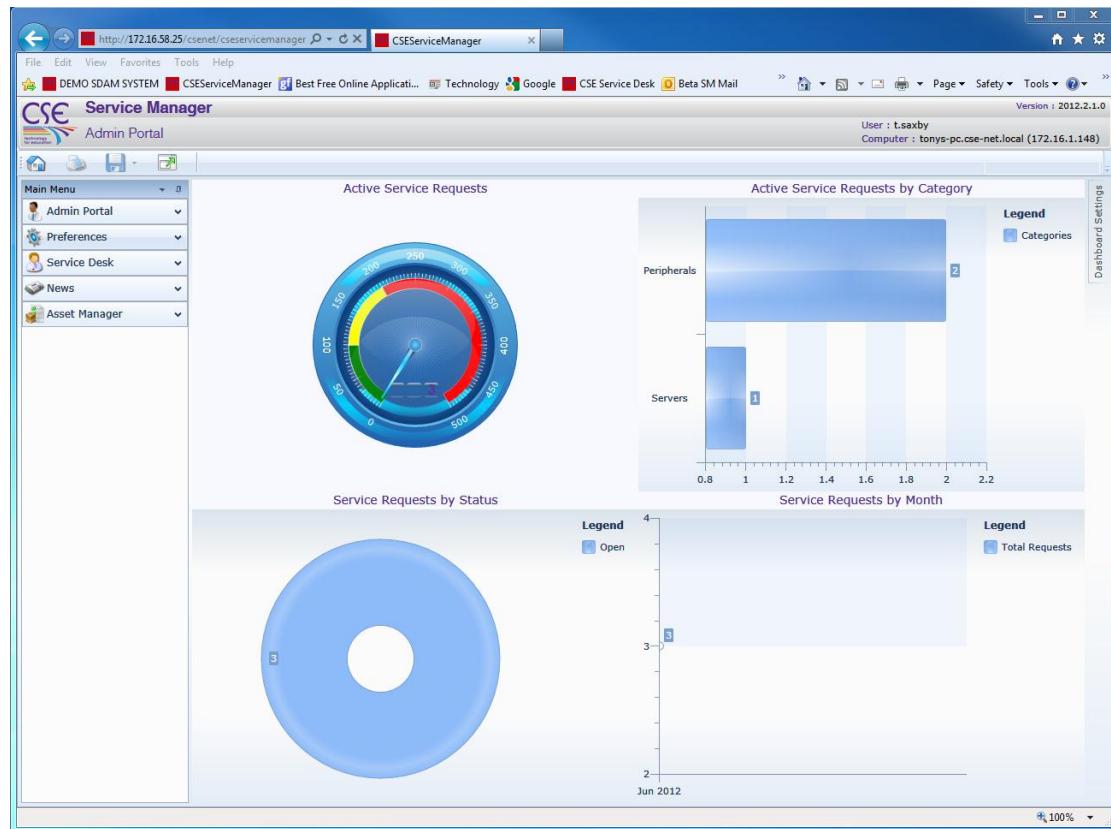
The default installation of the *Service Manager* provides you with the basic template needed to get started. Over time you will need to add to and modify *Service Manager* in order to tailor the system to your way of working.

Screen Size

Service Manager does take up a lot of screen space. We would recommend a minimum resolution of 1024 x 768. You can also use the IE zoom out feature and make the display slightly smaller - we have found that on the 1024 x 768 resolution that a custom zoom out of 85% works well, giving good visibility in terms of the dashboard and Service Request Tables.

User Interface Primer

Service Manager will automatically display the portals that your current login account is authorised to view. Anybody who has been assigned Service Manager Administrator rights will automatically be re-directed to the Admin Portal. But you will also be able to access the standard Service Manager Portal as well.



The web interface is standard across all three portals (Admin, Technician, and User).

At the very top of the screen, is the main banner. It contains a customisable logo, the name of the portal, the username and access station IP address. These details will be recorded against any Service Manager transactions that take place in order to provide traceability on all Service Manager operations.



Under the banner is the toolbar. These functions are context sensitive and may be greyed out when not appropriate to the function/screen you are viewing. From left to right these functions are: *Home* – Returns to the home screen; *Print* – allows you to send the dataset you are working on to one of your printers; *Save* – allows you to save the dataset you are viewing to disk; *Full Screen* – switches your browser into full screen mode.

On the left hand side, you can see unpinned Main Menu and News objects. You can 'pin' these objects to margins of the screen in order to make more room available for the main task windows.

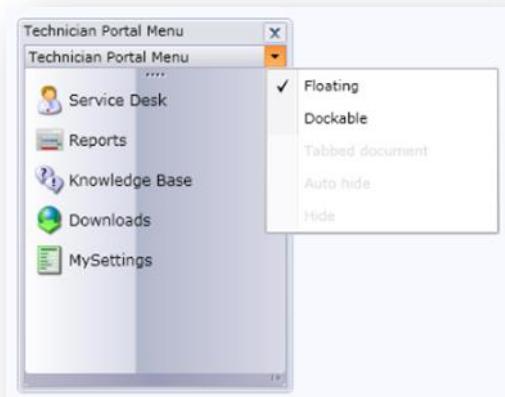


Clicking on the small pin icon docks or docks the object. The icon will change - the pin pointing to the left means that the object is pinned to the side. The pin pointing downwards (as shown) means the object is unpinned.

The undocked objects appear as tabs running down the left hand side of the Service Manager window.

You can expand the object by moving the mouse over the required tab. The objects will then slide out and expand to its normal size.

When you move the mouse away from the object, it will slide back into the screen margin



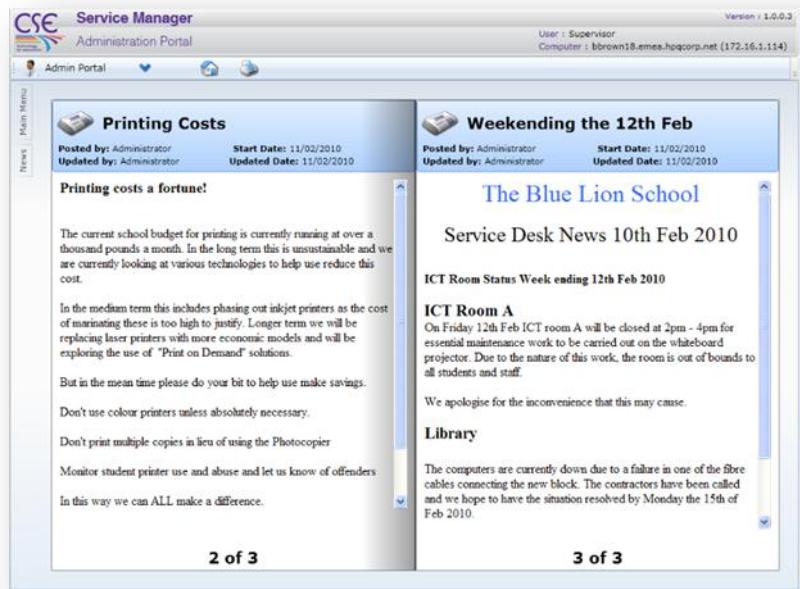
By clicking the small down arrow icon, you can access additional menu display functions.

The *Floating* menu option creates a menu that can be positioned anywhere within the console screen. It will always sit on top.

The *Dockable* option allows you to drag the menu to any console screen margin. When you maneuver the menu towards the side margin a series of small arrow markers will appear.



To grab the screen margin, position the menu title bar over one of these arrows. You will see when the menu has docked by a colour change - release the menu and it will dock into the margin selected. In addition, you can create a toolbar effect by docking a menu to the top of the screen.



The [News Tab](#) displays the current system news pages. News is stored as single pages, but multiple news pages can be created. The method of creating and maintaining the system news is covered later in the manual.

When the news is displayed in newspaper mode, you can move the mouse to the top left or right of the page and drag to turn the page over.



Dashboard primer

When you log on, the first screen that you see is the *Service Manager Console Dashboard*. The aim is to present a series of charts that display the state of service requests currently active on the system.

You can customise the information displayed within the dashboard to meet your own preferences. You will find a dashboard settings tab on the top right hand margin of the display. This tab works in a similar fashion to the Portal Menu and News tabs described earlier in the manual. To expand the *Dashboard Settings* menu simply hover your mouse over the tab.



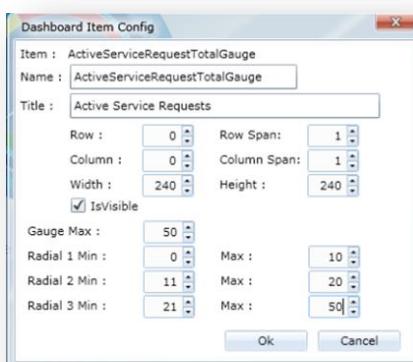
The Dashboard frame can display multiple charts depending upon your personal preferences. The *Page Layout* section allows you to define the number of rows and columns. The *Show Grid Lines* tick box switches on grid lines within the Dashboard frame, which help you align the charts within the display space.

While you can define multiple frames, the effective maximum is 2x2: greater than this will tend to squash the display making the charts difficult to read.

Below you can see the Dashboard configured in a 2x2 format with the grid lines switched on. In this situation we have three charts being displayed - the bottom chart is configured to span both columns.



Dashboard Frames



The space made available for dashboard can be subdivided and individual charts placed within a frame. Row and column number references the frames. The top left frame is row 0, column 0.

To understand this concept further it is best to look at the individual chart settings using the dashboard display above as an example.

Row 0 - Column 0 (top left frame)

Positioned in row 0, column 0, the top left quadrant of the dashboard display.

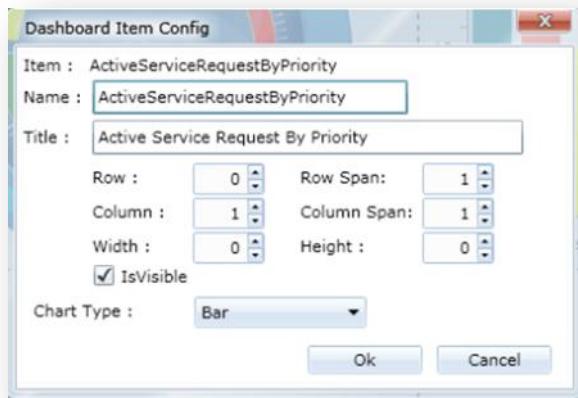
The row and column span fields are set to 1, which means the chart will occupy only one frame.

The width and height settings are absolute values and relate to the available display space. If these are set to zero, the system will use automatic values and generally fill the allocated frame space.

The gridline feature is a useful aid when it comes to positioning the chart within the dashboard.



Row 0 - Column 1 (top right frame)



The position row 0 column 1 is the top right quadrant of the dashboard display.

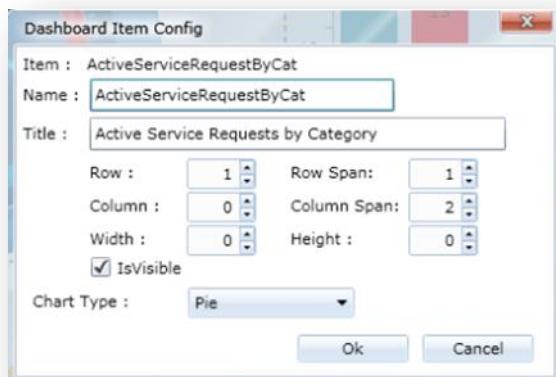
The row and column span fields are again set to 1, which means the chart will occupy only one frame.

Once again, the width and height values are set to 1, the chart will automatically size in order to fit the specified frame.



The new chart displays in the top right hand frame.

Row 1 - Columns 0 (bottom left frame)



Row 1 column 0 is the bottom left quadrant of the dashboard display.

The column span field is set to the value 2. This means that the chart will occupy both column 1 and 2.

Once again, the width and height values are set to zero, which means the chart will fit within the specified frame(s) automatically.



The bottom chart now occupies both of the bottom frames.

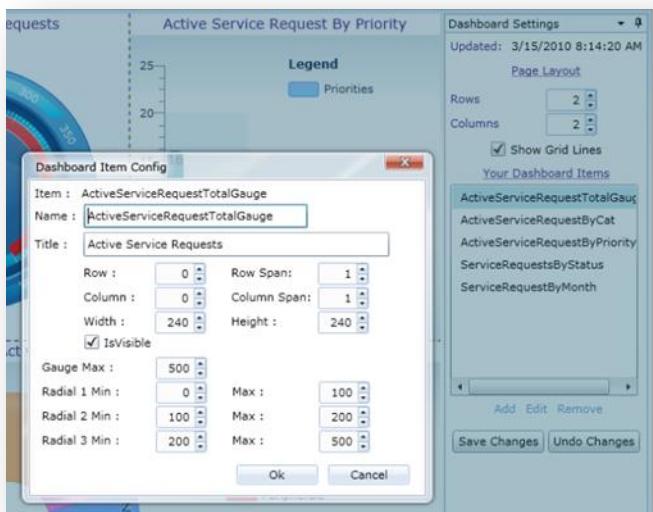
It is probably a good idea to experiment moving charts around the various frames in order to get a good idea of how the formatting works.

Dashboard Charts

By default there are five standard dashboard graphs that can be displayed within the various frames.

Active Service Requests

This is a gauge style graph that displays the total number of currently active Service Requests. This chart is the only one of the set where you cannot change the actual graph style. Around the circumference of the gauge you will see colour coded arcs that can be customised to meet your establishment's needs. These represent normal operating levels in green, alert level in yellow, and danger in red.



column. We will look at these later on in the chapter.

The Is Visible switch allows you to control whether this graph is displayed within the dashboard.

Below are the gauge specific controls.

Gauge Max sets the total value that is to be displayed - each unit represents on active Service Request.

Radial 1 Min and **Max** configures the total number of units that are marked in green (Safe Level)

Radial 2 Min and **Max** configures the total number of units that are marked in yellow (Alert Level)

Radial 3 Min and **Max** configures the total number of units that are marked in red (Warning Level).

In normal operations the number of active calls open should be in the green arc. This will typically show that the technicians are in control and dealing with the service requests as they come in. If you start hitting the yellow arc, this could indicate that things are getting out of hand and more resources may be needed in order to resolve on going issues. Hitting the

To edit this graph's properties, select the [Active Service Request Total Gauge](#) and click the [Edit](#) link.

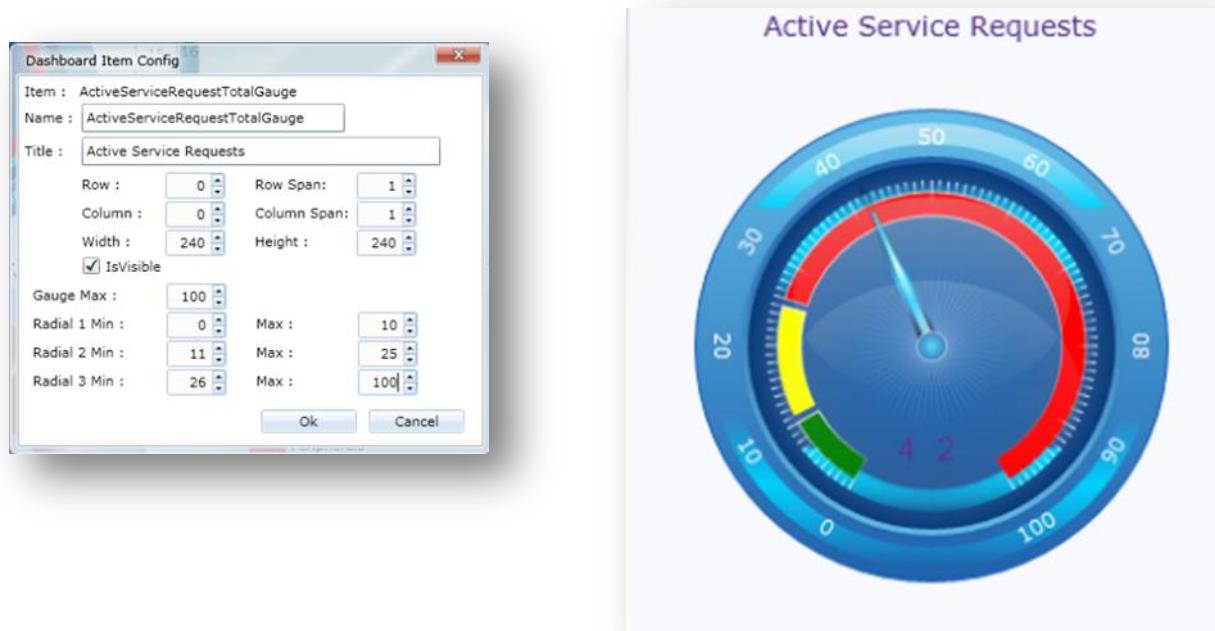
Here you can change the [Name](#) and [Title](#) by editing the text within the corresponding text boxes.

The [Row](#) and [Column](#) fields allow you to specify where this graph is going to be displayed. Here Row and Column are 0 - which represents the top left position in the 2x2 split display frame.

Row and column span settings allow you to extend and stretch the graphic into an adjoining row or

red arc means that technicians have lost control of the requests and some serious action is going to be needed in order to resolve issues.

Look at the example below: where we have the gauge set to display a max of 100 open calls, normally we would expect a maximum of 10 open requests at any point in time and begin to get worried when we reach 25.



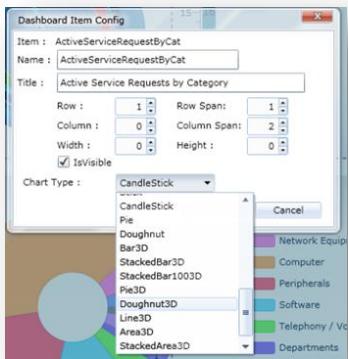
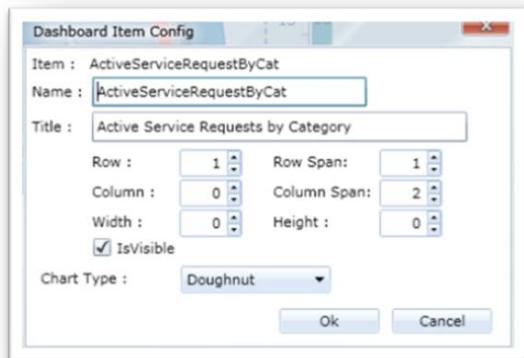
To save this within your personal dashboard settings, click the **Ok** button.

Active Service Requests by Category

This charts active requests by the category that was entered.

As in the example before, you can change the name and title as well as select the row and column it will appear in.

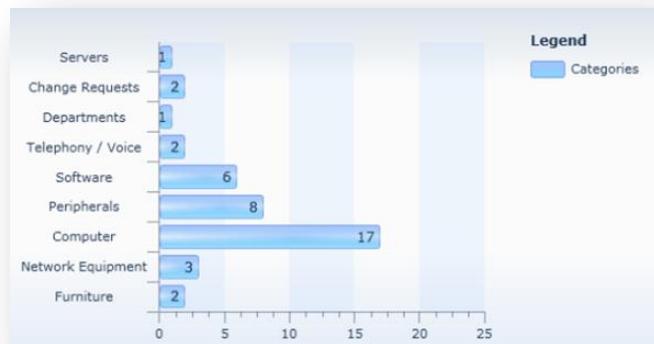
However, where things do change is that you can choose the chart type. Expand the list box and select the type of chart that you want. There are 33 different chart types to choose from.



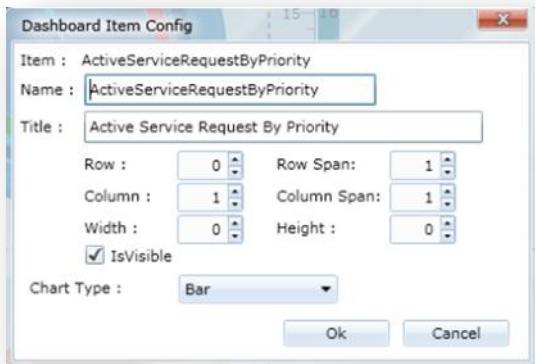
You need to select the type of chart with some care. Some of the datasets available might struggle to be displayable within the allocated frame size.

Any chart based upon category might struggle with the sheer number of categories that the Service Manager administrator may have created.

You will need to experiment with the various chart types in order to discover the one that is appropriate to your dataset and your own preference. Below is the Horizontal Bar Chart output.



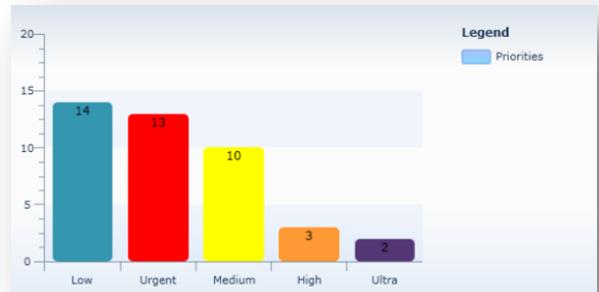
Active Service Request by Priority



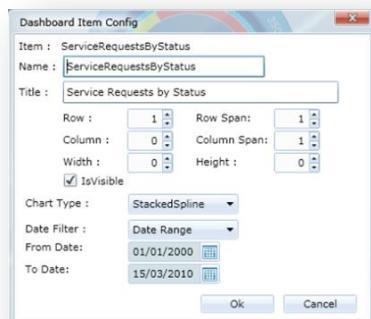
This charts active calls by the priority that has been assigned.

Controls are as described earlier, and you can choose the chart type.

The priority colour codes will match those selected by the Service Manager Administrator.



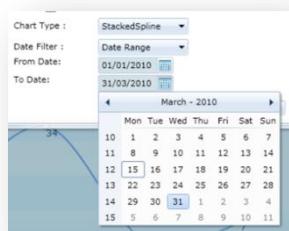
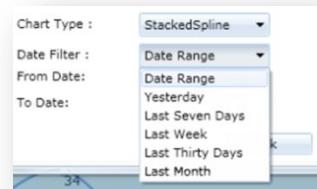
Request by Status



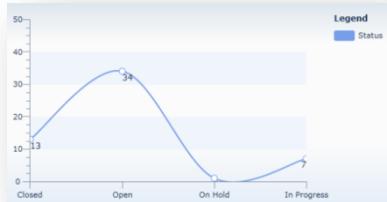
This charts the active Service Requests by status.

This chart is slightly different, in that it displays all historical data and includes all types of status, including closed calls.

As a result this chart allows you to filter the resulting chart based upon date range. You can select as appropriate from the list box.



Alternatively you can specify a start/end date range using the calendar controls. In this example we have selected the first quarter of 2010.

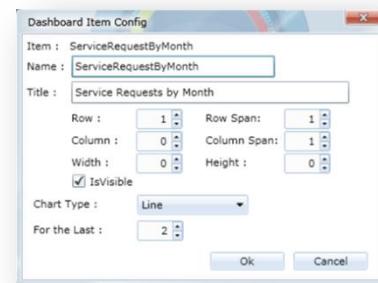


In this example we have selected the stacked spline chart type.

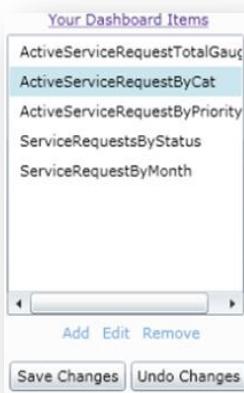
Total Requests by Month

The final dashboard chart charts the total number of Service Requests added per month.

Select the number of months you want to chart by rolling the number in the selection box using the arrows provided.



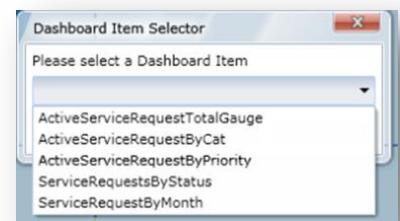
Other Dashboard Controls

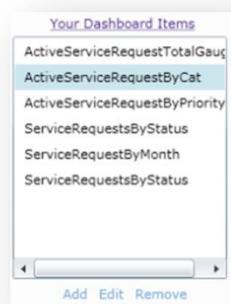


The list contains the display elements that you have selected to have in your dashboard. Note that not all these will be displayed: you have to select the item and tick the *Is Visible* option for it to be displayed.

The Add button allows you to add another item into your dashboard list. As you have seen in the examples above, you can modify some of the items to display different chart types and possibly filters such as date ranges. You might want to create a dashboard item that duplicates an items function, but uses a different chart type or date filter range.

Take for example the *Request by Status*: you could have two charts side by side in the dashboard. The first displaying the last 3 months data, whilst the other displays the trends over that last year.

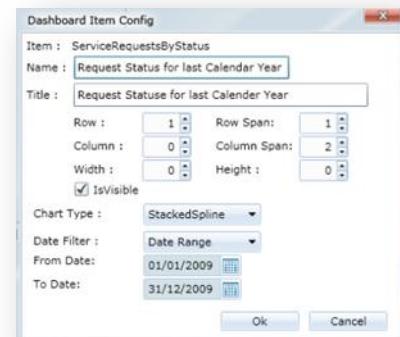
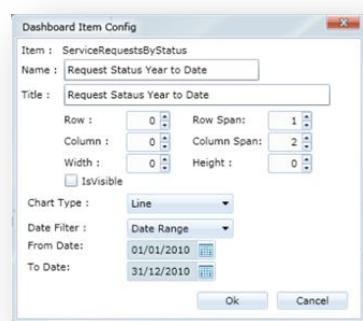




From the item selector, pick *ServiceRequestsByStatus* and then click the **Select** button.

The dashboard items list now contains two items with the same name. Modify the list from select the first one in list and select the Edit link.

Change the Item Name and Title and then select the chart options as appropriate.



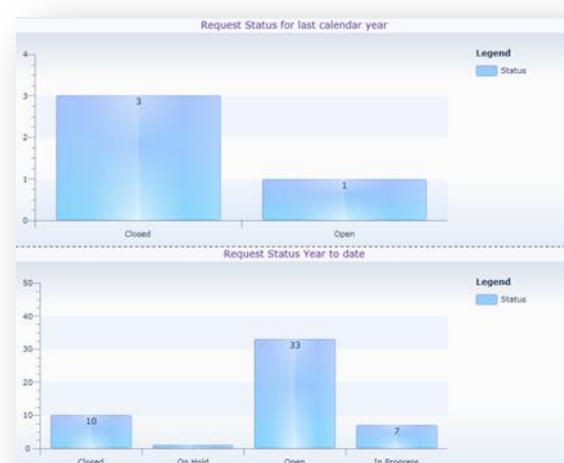
Select the second occurrence and change the Name and Title fields as appropriate. Then select the chart type and date filter.

The result is two charts that are of the same type, but displaying a different set of data based upon the date ranges we specified.

This allows you to build your own personal library of dashboard items that you can switch on or off as required.

If you wish to remove any of the dashboard items from your list, highlight the item and click the Remove link.

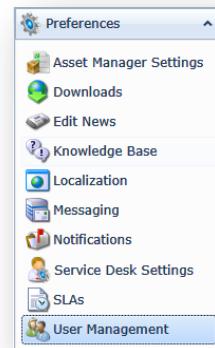
Finally, after you have added, edited or removed a dashboard item from the list, please click the **Save** button.



Service Manager Admin Preferences Menu

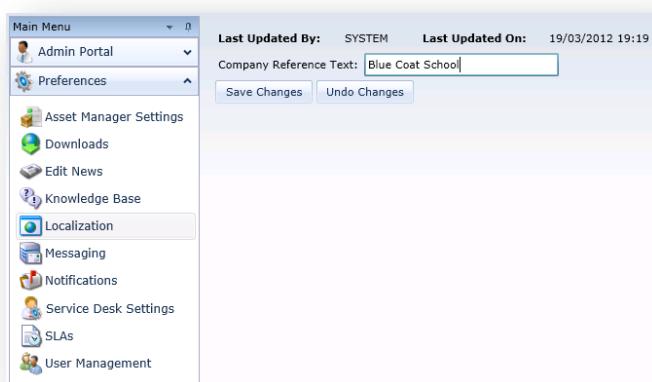
Service Manager configuration and management options are found within the Admin Portal, under the Preferences menu.

Clicking on any of menu items will display the options available.



Preferences/Localisation

Before we look at user management, we need to talk about localisation. As a software vendor we strive to make our systems appropriate across a range of markets segments. Though we are traditionally a specialist supplier to the education market, Service Manager is appropriate across many segments. So in order to cater for these, we have added a facility that allows you to subtly change the way the system addresses itself.



By default the system makes the assumption that your organisation is a company. However, you can change this by simply specifying your own localisation setting. In reality all this does is change the general headings so that they are appropriate to your organisation's circumstances.

Enter a reference that more appropriately describes your organisation in the box provided.

Click **Save Changes** when finished.

Preferences - User Management



User Management is common across the Service Manager, Asset Manager and Asset and Room Booking systems. For the purposes of this manual, we are only describing functionality as related to Service Manager.

Service Manager is fully integrated with your system's Active Directory and as such operates with the AD user and groups that you have configured on your system. We would always recommend that you manage the way that your end users access the system by group membership as opposed to assigning individual users to the system. This is considered best management practice by Microsoft, and really does make managing your users easier.

Our recommendation is that you create AD security groups called *SD Admin*, *SD Tech* and *SD Users*. Then add all appropriate users into each of these groups.

There are three main classifications of user. These are Administrators, Technicians and End Users. By convention Administrators have full control of the system and are responsible for the administration, configuration and running of the system. Technicians best describes those users whom assist in the general day-to-day process of dealing with and resolving issues that have been reported. Finally, the End Users are those who use the system to report and log issues using the system.

The menu on the left-hand side sets the focus on the type of system user you are working on: in example above this is Administrators. To change focus, simply select the appropriate classification from the menu to the left.

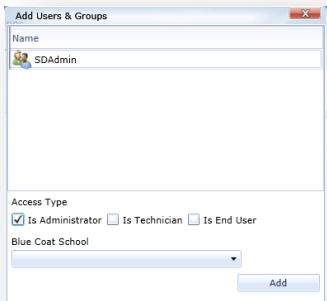
Adding Users/Groups

Click the **Add** button in the toolbar and then scan through the list of users and groups, select the appropriate individuals or groups.

Use the control key to allow multiple selections to be made.

In this example we have an AD group called SD Admin.

When you have made your selections, press the **Add** button.



Next, select the access type that is to be assigned to these users (Is Administrators) and click the **Add** button.

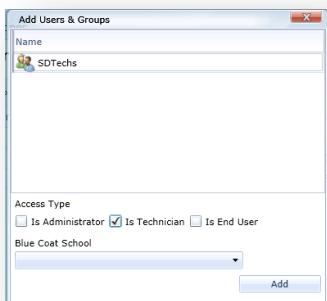
The display now updates and displays the selection you have made. The system displays the individual users who are members of the SD Admin group we selected. The system will also pull additional details for these users directly from their active directory account properties.

The Active Directory can contain a lot of useful information about individual users within its database. How many of these fields that have been populated depend upon how much information was specified when the account was first setup, or how much has been added at a later date.

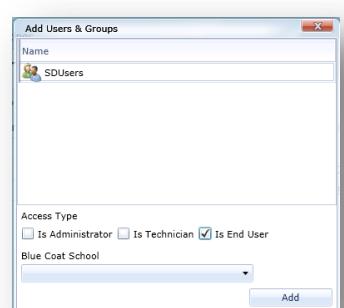
Disabled	IsAdmin	IsTechnician	IsEndUser	Blue Coat School	First Name	Last Name	Display Name	UserName	Description
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Blue Coat School	Vicki	Jackson	Vicki Jackson	V.Jackson	Administrator Built-in account for administering the computer/domain
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Blue Coat School	Tony	Saxby	Tony Saxby	T.Saxby	CSE Engineering
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Blue Coat School					

Basically our design goal has been to make Service Manager completely integrated within the AD environment, and to effectively use the AD as the account reference source. For instance, when notifications are emailed out by the system, it uses the AD to look up the user's primary email address. If you are using an MS Exchange server, this AD field is filled in for you when you create the user's mailbox.

The same process is utilised to now add the other classifications of users. Simply click the **Add** button, browser and select the users or groups as appropriate and add them, making sure that you select the appropriate user type classification by ticking the appropriate box.



Whilst the system will allow you to tick multiple user classifications (Administrator/Technician/End User), there is no need to do this as it serves no real purpose. By convention, the user types inherit from the top down. Service desk Administrators have all the functionality of Technicians and End Users, Technicians have the same functionality as End Users.



The system will now display the appropriate users assigned to each classification, to view simply click the appropriate header found in the menu on the left-hand side of the portal window.

First Name	Last Name	Display Name	Username	Description	Email	Mobile
Tom	Townsend	Tom Townsend	T.Townsend	CSE Engineering	T.Townsend@rockroll.local	
Michael	Graham	Michael Graham	M.Graham	CSE Engineering	M.Graham@rockroll.local	
Mark	Land	Mark Land	M.Land	CSE Engineering	M.Land@rockroll.local	
Leon	Greenway	Leon Greenway	L.Greenway	CSE Warranty	L.Greenway@rockroll.local	
John	Eccleston	John Eccleston	J.Eccleston	CSE Engineering	J.Eccleston@rockroll.local	
Jason	Bowyer	Jason Bowyer	J.Bowyer	CSE Engineering	J.Bowyer@rockroll.local	

Granular Access Control

A new feature in this version is the ability to have much greater control over what users can do within the service desk system. These controls filter from the top down, at the top we have Administrators, then Technicians, and finally End Users.

Within each type we have group level, for instance Administrators, SD Admins or Technicians/SD Techs.

Finally the lowest level is the individual user.

At the top level for Administrators, you access the granular access control by clicking the Settings tab. A permissions list then appears in which you can scroll down and make appropriate modifications to the access to various functions that are available.

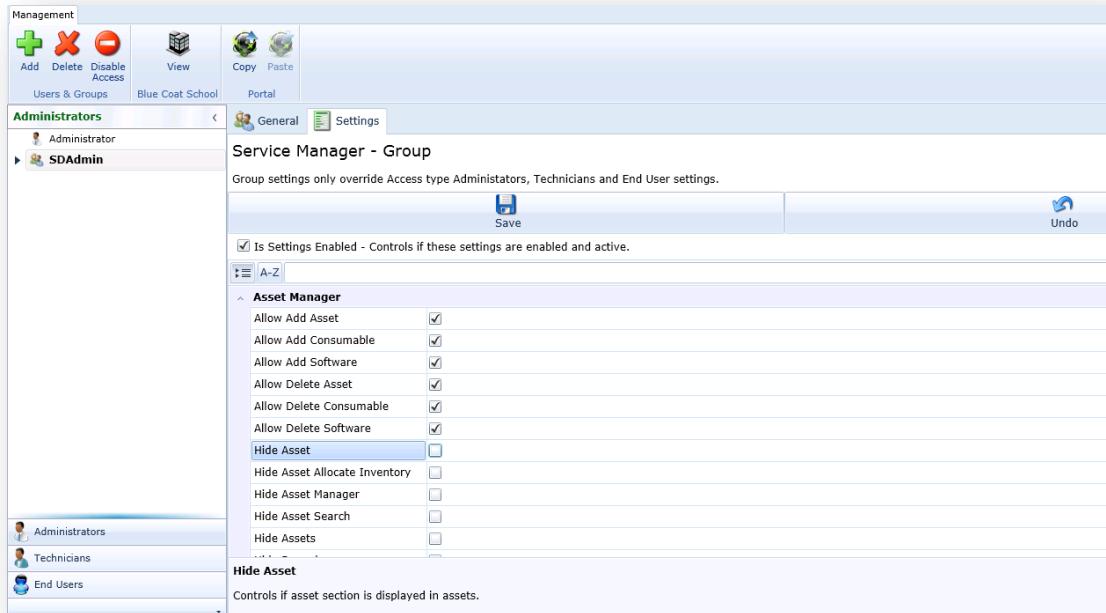


Many of the settings available here also controls the level of access granted to the Service Desk, Asset Manager and Asset and Room Booking.



You need to be very careful changing Administrator rights, as you could inadvertently disable access and remove your rights to modify these settings!

If you want to make settings that appropriate to one of the groups you have added, click the group name (in the table under the main group header menu). Select the *Setting* tab and make your modifications as you feel appropriate. In order to enforce these settings you must also tick the *Is Settings Enabled* box. When you have made your selections, click the *Save* button to commit your changes.

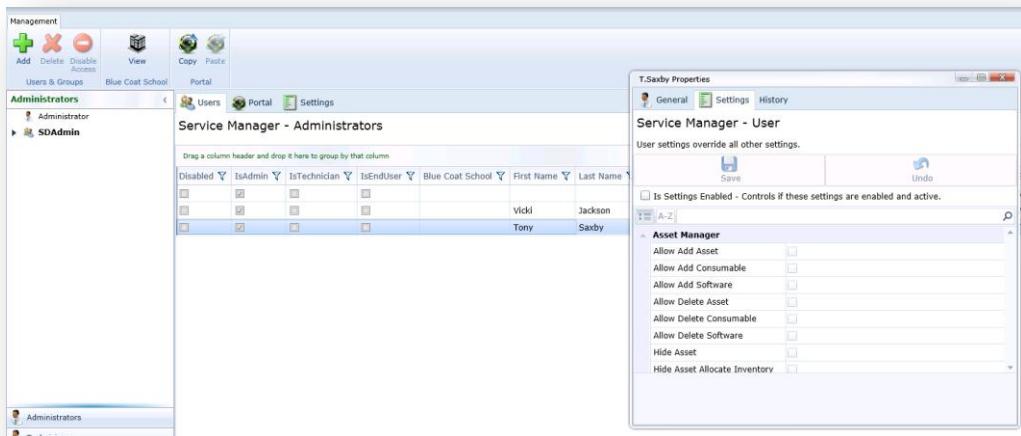


Finally you can create, drill down, and assign settings on individual users. There are two ways that you can do this. In the example above we have assigned Administrator (user) and SD Admin as service desk administrators. They show up within the Administrators menu to the left. You can simply click a user within that list and then click the Settings tab, then make the changes that you require. You can also click a group and that will then expand to show the members of that group. Again you can simply select a user from the group list and then click the Settings tab.

Finally, when you view the Service Manager user setting at the top most level, you can double click a table entry and click the Settings tab from there.



For completeness, the following table documents the all the functions that you have control over.



Asset Manager	Description
Allow Add Asset	Controls whether assets can be created
Allow Add Consumable	Controls whether consumables can be created
Allow Add Software	Controls whether software can be created
Allow Delete Asset	Controls whether assets can be deleted
Allow Delete Consumable	Controls whether consumables can be deleted
Hide Asset	Controls whether asset section is displayed
Hide Asset Allocate Inventory	Controls whether asset allocate stock menu displayed
Hide Asset Manager	Controls whether Asset Manager menu displayed
Hide Asset Search	Controls whether Asset Manager search menu is displayed
Hide Assets	Controls whether assets menu is displayed
Hide Barcode	Controls whether barcode menu is displayed
Hide Consumables	Controls whether consumables menu is displayed
Hide consumable Stock Inventory	Controls whether stock inventory menu is displayed
Hide Import/Export	Controls whether the import/export menu is displayed
Hide PAT Testing	Controls whether the PAT testing menu is displayed
Hide Software	Controls whether the software menu is displayed
Service Desk	Description
Allow User Close Request	Controls whether a user can close a request
Allow User Reopen request	Controls whether a user can reopen a request
Hide Service Desk	Controls whether service desk menu is displayed
Hide Service Desk Email	Controls whether service desk email menu is displayed
Hide Service Requests	Controls whether service request table is displayed
Hide Submit Service Request	Controls whether user can submit service requests
Service Manager	Description
Content Transition	Select transition mode from list
Enable Change My Settings	Allow user to change their own settings
Enable Downloads Modify	Controls whether a user can add/edit downloads
Enable Knowledge Base Modify	Controls whether user can add/edit KB articles
Hide My Settings	Controls whether the user can see the My Settings menu
Hide News	Controls whether News is displayed
Hide Reports	Controls whether the reports menu is displayed
Show Dashboard	Switches the Dashboard display on or off
Theme	Select Theme from list

 Granular control gives you the ability to configure the various service desk features right down to individual user level. However, we would recommend that you refrain from making specific changes on individual users as this will eventually increase your system management workload.

We strongly advocate the use of domain security groups when building bespoke service desk configurations.

User General Settings

Within the user management module, you can access and change various user-related settings. When you select a user from the menu or by double clicking a table entry, the general tab will give you access to that user's basic dataset.

As we explained earlier, this general information is normally pulled from the user's AD account information. If you make changes here, it writes this information back into the user's AD record.

In this example the Theme/Content Transition and Show Home Dashboard have been greyed out because these options have been configured at the group level. To enable these settings you would need to enter this user's Settings tab and tick their settings 'enable' tickbox.

User History

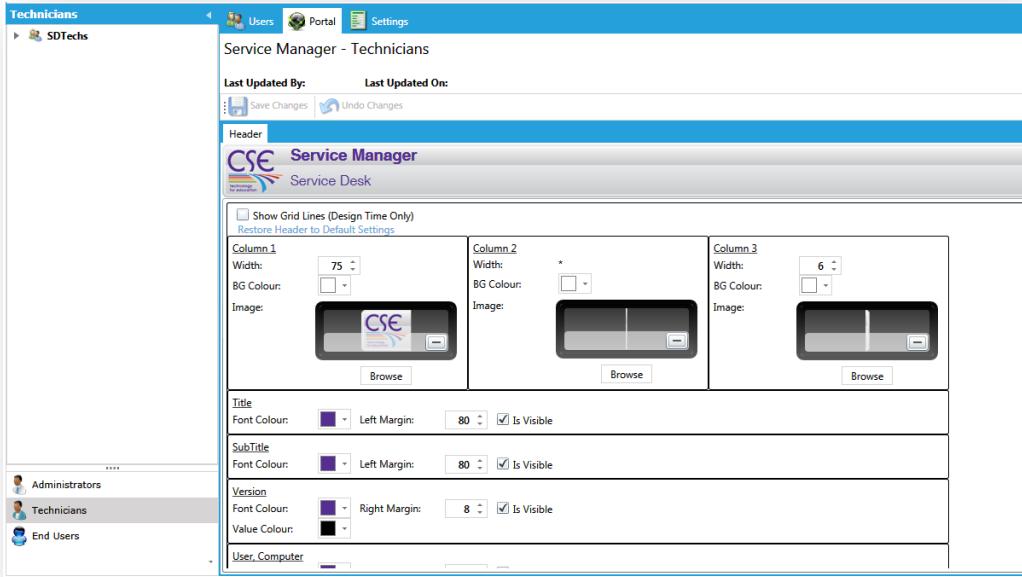
Associated with each user is a History tab. Service Manager by its nature logs and records every operation that takes place. This means that use of the system is fully audited and it is possible to trace everything back to its point of origin. The history tab provides a trace of what the selected user has done whilst using the system. This history can be saved to file, or printed out.

Log Date/Time	Log Type	Log Text
29/10/2010 08:18:37	MySettings	Theme Changed to Transparent , Show Dashboard Changed to True
03/11/2010 11:06:33	KBArticleViewed	This user viewed KB Article : Domain Controllers on Virtual Server Systems
03/11/2010 11:07:41	KBArticleViewed	This user viewed KB Article : Domain Controllers on Virtual Server Systems
10/11/2010 09:42:11	UserManagement	Changed User Settings for :OXFORDS1 - Primary Email Changed to davidh@oxford.oxon.sch.uk , Theme Changed to Windows7
12/11/2010 11:17:07	UserManagement	Changed User Settings for :B.Wood - Primary Email Changed to briarw@cse-net.co.uk
12/11/2010 11:18:10	UserManagement	Changed User Settings for :S.Hawkins - Primary Email Changed to steve@cse-net.co.uk , Theme Changed to Windows7
12/11/2010 11:18:39	UserManagement	Changed User Settings for :W.Smith - Primary Email Changed to waynes@cse-net.co.uk , Theme Changed to Vista , Show Dashboard Changed to True
12/11/2010 11:19:05	UserManagement	Changed User Settings for :E.Wallacott - Primary Email Changed to emilyw@cse-net.co.uk , Theme Changed to Summer , Show Dashboard Changed to True

Portals

Service Manager has three user portals, Admin, Technician and End User. You can alter the appearance of each of these portals, customising them to meet the requirements of your establishment. You can customise the individual portal banners, making it possible for you to 'brand' the system with your own logos.

The individual portal controls are accessible by selecting the appropriate service desk user type header (Admin/Technician/End User) and then clicking the portal tab that is displayed.



The header is split into three areas, going left to right these are called **Column 1**, **Column 2**, and **Column 3**. You can include an image (logo) in each of these columns and specify a background colour. The column width control allows you the size the image that you are applying to each column. When adjusting the column width, the size changes in real time, so you have visual confirmation of the alteration being made.

You cannot change the banner header text, but you have the option of switching it off and/or changing font colour and position. Any changes you make appear in real time as you apply them.

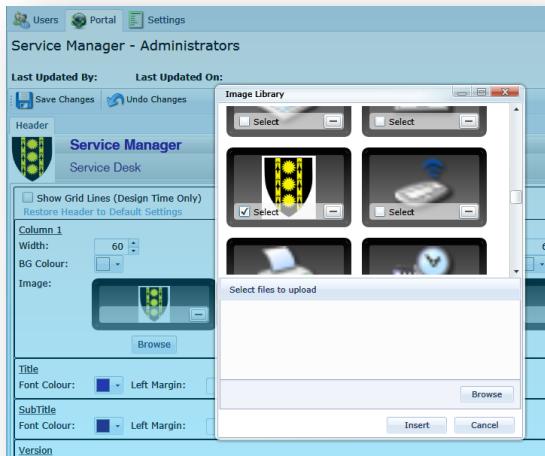
The Admin and Technician Portal configuration settings are the same: you have control over the banner only. The End User Portal is slightly different as you can also manage and create a start page message. We will come to that later in this section.

Since the banner format controls do the same for each of the three portals, we will only explore modifying the Admin portal banner. You can then use the same procedure to modify the Technician and End User portals. By using different coloured banners for the three portals, you will be able to see which portal is in use by a quick glance at the screen.

The *Show Grid Lines* tick box is a design-only feature. It simply switches on a set of grid lines within the banner that allow you to accurately judge column positions.

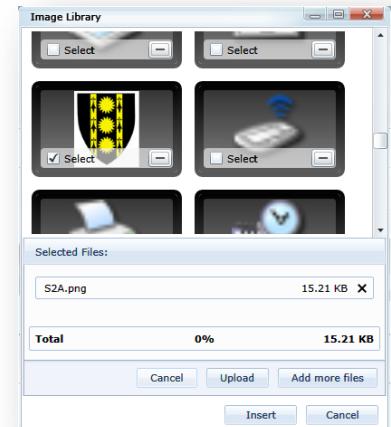
To see what images are already within the database, or to add your own images, click the **Browse** button.

 The image library is general purpose in nature and as such is capable of handling large images (such as photographs). However the portal banners are fixed in size and the images that are applied here should be approximately 60 x 90 (W/H) pixels. If you try and use images larger than this, they are unlikely to fit well.



The image library control allows you to select existing images by searching the library and ticking the select box against the chosen image. Click the **Insert** button to make the selection.

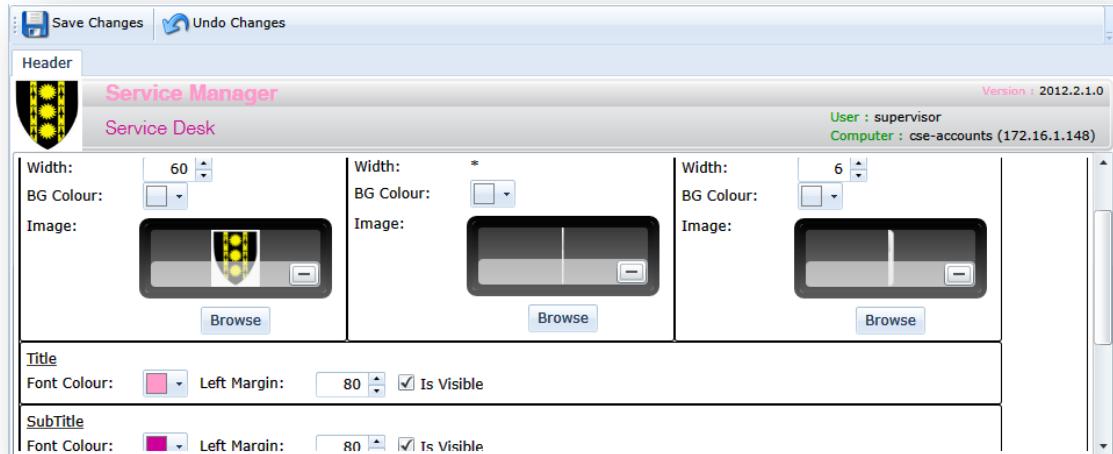
If you wish to import a new image, first make sure that the image you want is of an appropriate size. Then use the **Browse** button to search and select the file. Not you can import up to three images in one operation if you so wish.



 To upload the selected images, click the **Upload** button. Once the image has been uploaded into the database, you can immediately scan the image library and select your new image and insert it into the banner.

Please note that the image library is a common component within the system. Any images uploaded here can be used in any situation where images can be displayed. This includes the portal banners, news articles, end users' portal welcome screen and Asset Manager.

Once the image has been selected, the portal banner at the top of the screen changes to show you what it will look like.



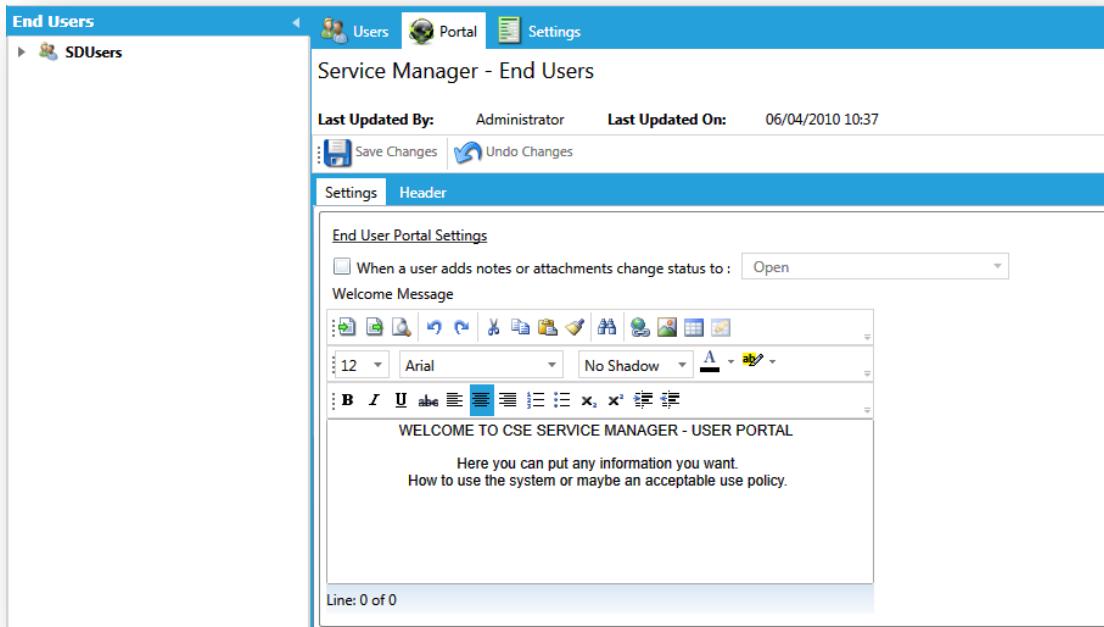
Notice the small minus symbol beside the image. Clicking on this removes the image from the banner.

BG Colour (Background Colour) allows you to specify the background colour that will appear in the column. However, it really only has any use if no image is specified in the column.

The same basic principles apply for the remaining column, except that you will notice that column 2 has no width control. That is because its size is set by the width settings of columns 1 and 3 respectively. Also, images contained within column 2 need to be in the style of a ribbon in order to work properly.

When you are happy with the results, click the **Save Changes** button. You always have the option of reverting back to the system default banners by clicking the [Restore Header to Default Settings](#) link.

The End User Portal settings are slightly different. This is because when somebody logs in as an end user, they do not have access to the dashboard. Instead the start page can contain a message. This message can include images as well as text and can be customised and branded as appropriate. You can also include messages, such as simple operating instructions.



There is an option to change the status of a service request when the end user posts an update to a request they have previously entered. This action is dependent upon the operating procedure that you decide upon in the implementation of your system.

One of the important functions of a service desk is to be able to measure performance against published Service Level Agreements (SLAs). When a service request is entered into the system a number of timers start running. These timers are used to determine if the service responders meet the agreed response times for a particular class of request type. Sometimes situations occur where actions have to be passed back to the requesting user. They might not have supplied the information you need to resolve an issue. It is entirely appropriate to 'stop' the timers whilst you request clarification points, in which case the normal response would be to place the service request on hold whilst waiting for a reply. This stops the timers and prevents SLA escalations from triggering.

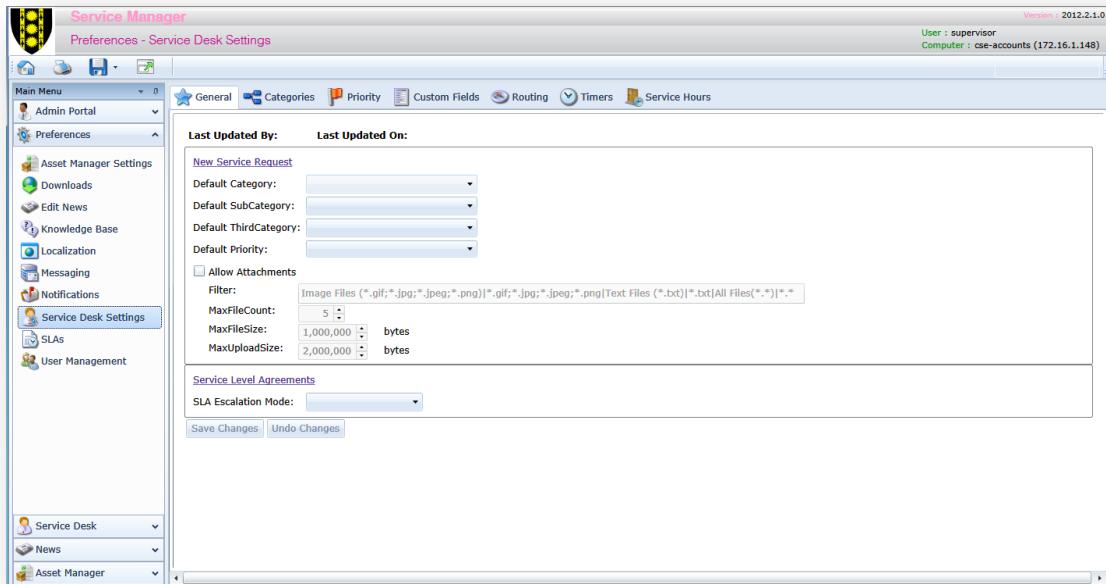
However, since the end user usually does not have the ability to change the request's status, you can tell the system to resume the timers as soon as an end user responds to a request for more information. The correct way to do this is to set the system to change the request status to 'open' after a note or attachment is added.

Portal Copy and Paste

To make life easier, there is a facility that allows you to copy and paste the headers between the three different user portals. Simply select the header, click the **Copy** button. Then select the portal that you wish to update and press the **Paste** button.

Preferences and Service Manager Settings

Service Manager Preferences is where the main service desk configuration is performed. Across the top of the window are various tabs, each one linking to a separate service desk setting functions.



Preferences\Service Manager Settings\General

The **General** tab displays the configuration settings for the main Service Manager Portal. It allows you specify the default load configuration for the end users interface to the system.

Default Category - the list box will display all the default categories entered into the system. You can pre-select the category that will be displayed by default when the system loads.

Default Sub Category – the list box will only display those sub categories that have been defined as being associated (child object) of the selected Default Category.

Default Third Category - the list box will only display those third categories that have been defined as being associated (child object) with the selected Default Sub Category.

In the example above we have selected Computer as the default category, PC as the subcategory and can see the options available for the third category. If any of the default category selections are left unselected, then users must choose the categories manually themselves when using the *Service Manager Portal*.

Default Priority - list box will display all the available priority levels. You can pre-select the required priority level to be displayed when Service Manager starts.



Allow Attachments - allows you to specify that end users can upload attachments as supporting information.

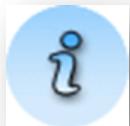
You can specify filters so that only authorised file types can be uploaded, specify how many files can be uploaded (MaxFileCount) and set the maximum size of the file (MaxFileSize).



If you have been using the previous version of Service Manager, you will notice that the default email notification controls have been removed. This is because the notification system has been completely reworked and is now part of the new notifications system.

SLA Escalation Mode – We have made a change to how of the SLA escalation level can operate. In the previous system the SLA Escalation Level could only increment upwards. However a number of requests have been made to allow this number to be able to be moved both up and down, as this introduces more flexibility in the way in which SLAs can hand a service request to another SLA stack. Please see the SLA section for the logic behind this change, and what it gives you in terms of increased functionality.

The SLA Escalation Mode is a switch that allows you to select *Up Only* or *Up & Down*. We will discuss how this works in the SLA section of the manual.



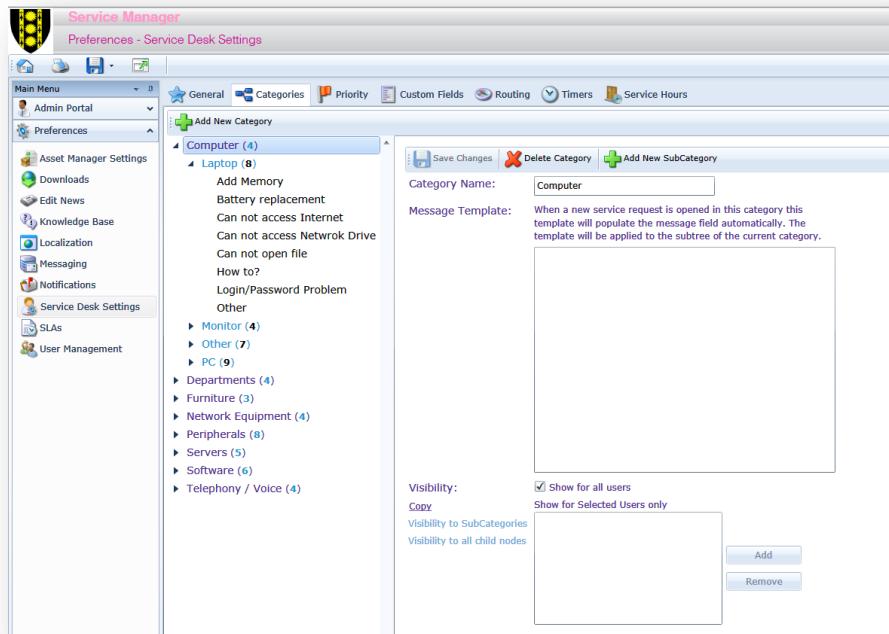
After making any changes to the service desk's general preference settings, please ensure that you click the Save button to commit your changes. The Undo Changes button allows you to revert back to the previous configuration.

Preferences \ Service Manager Settings \ Categories

By creating a set of service categories, the Service Manager Administrator can streamline the end users Service Request data entry process. The service request categories also make it possible to automatically route Service Requests to the most appropriate Service Responders (Technicians).

Categories can also be linked to different Service Level Agreements (SLA), thus providing automatic escalation when appropriate.

Finally, categories help with managing the service desk by grouping similar calls together. The data formatting and reporting systems make extensive use of categories.



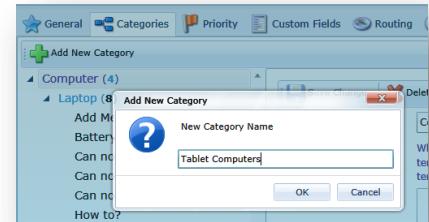
The default installation includes a number of pre-defined categories that form a basic framework from which you can start to create your own structures.

There are three linked levels to each primary category. The Sub and Third categories are optional, but their use does allow you to add structure to your Service Requests. A well-structured database will help you manage and maintain your service desk.

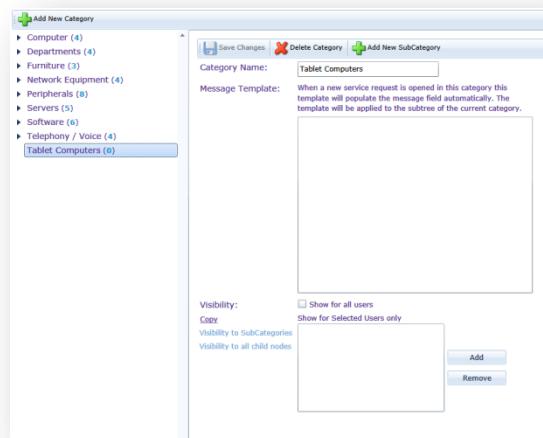
The system is completely customisable and you can add whatever structures you so wish to the system.

Adding a new Category

Click the **Add New Category** button and then add your new category name in the text box. Click the **Ok** button to complete, or **Cancel** to start again.

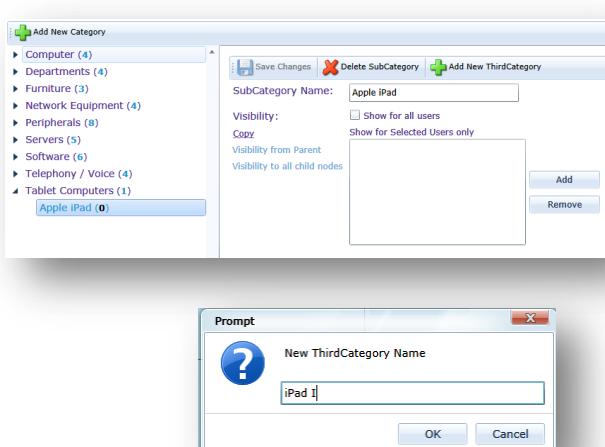


Adding a new Sub Category



Select the category that you want to add a sub-category for by selecting it from the table on the left.

Click the **Add New SubCategory** button and enter your new subcategory name in the text box provided. Click **OK** to commit the change, or **Cancel** to start again.

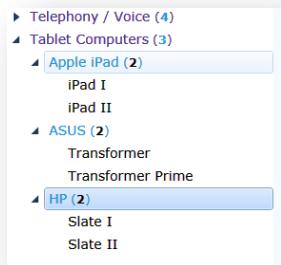


Adding Third Categories

Expand the Category table to the left by clicking the small arrow pointer adjacent to the category name.

Select the subcategory by clicking it. Click the **Add New ThirdCategory** button and then add the new name in the text box provided. Click **OK** to commit the change, or **Cancel** to start again.

In this way you build up a category structure that mirrors how you want to be able to structure your service requests within the database. You really need to give this process some thought as there is a temptation to structure everything down to minute scale. Whilst this might make the system technically easier for you and your staff to manage, don't forget that your end users might be confused by a complex structure. If the system is too complex, you might drive your end users away from using the system to report issues. We would advise you to do just enough to capture the data you want.



Other Category Controls

Add/Edit and Delete should be self-explanatory in terms of what they do for each aspect of the category structure.

At the main category level, the *Message Template* allows you to enter a default message field into Service Manager Request form. You can enter information explaining how to enter the required request, or simply a default message that bypasses the need for the end user to type anything into the message field when raising a request.

Category Name:	Tablet Computers
Message Template:	<p>When a new service request is opened in this category this template will populate the message field automatically. The template will be applied to the subtree of the current category.</p> <p>Use this category to report any issues or requests related to tablet devices. It helps us if you can indicate which type and model of Tablet you are asking questions about,</p>

When you come to using the newly entered categories, the *New Service Request* form will display the categories as defined.

Category Visibility and Access Control

You can control which of your Service Manager users can see and interact with the various categories you have created. It might be that you want to be able to hide certain service requests from different user groups. For instance, high-level issues like dealing with warranty issues with outside agencies are not appropriate for end users to interact with, so you can restrict who can see these types of requests to administrators and technicians.



By design, Service Manager does not allow you to delete or remove any requests that have been entered into the system. However it is inevitable that some service requests will be entered in error, or have been used for system testing purposes. It is probably inappropriate for end users to see these. You can therefore create some special categories that are effectively hidden from everybody except a few named individuals. You can then move Service Requests into these categories, which in effect removes them from general viewing by end users.

In this example we have created a category called Quarantined Requests, with appropriate subcategories. We want only certain individuals within the team to be able to see and use these categories.

To do this we use the category visibility controls to grant access to authorised users.

Category Name: Quarantined Requests

Message Template:

This category is hidden from general users.

Service Requests used for testing or entered in error should be added to one of these categories.

The Access Control List restricts who can see and use these categories.

Visibility:

Show for all users

Show for Selected Users only

Browse Service Manager Users

Name

- o.C.HUDSON
- SDAdmin
- SDTechs
- SDUsers
- supervisor
- T.Saxby**
- T.Townsend**
- V.Jackson

Add Close

To add users to the visibility list, click the **Add** button, then select the users from the list that appears. Note that there are two pre-defined groups: ****All Admins**** and ****All technicians****, together with all the individual users who have been granted access to Service Manager.

Select those users from the list (shift – click to multi select) and click **Add** to commit the change, or **Close** to start again.

You will need to click the category **Save Changes** button to write your selections into the database. You will need to do this before you gain access to the **Copy** functions.

The copy visibility functions apply your selections to either just the subcategories below, or to all nodes (Sub Categories and Third Categories)

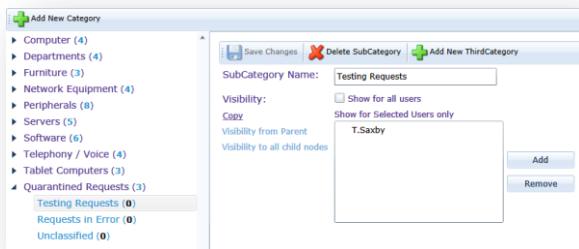
Visibility:

Show for all users

Show for Selected Users only

T.Saxby
T.Townsend

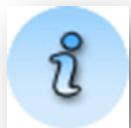
Add Remove



If you don't copy the selected users, you will only have access to the top-level category. However, you can still drill down the other categories and apply specific rights to them.

In this way you can apply specific permissions to view and use Categories, Sub Categories and Third Categories to select groups or individual users.

The Show for All Users option provides a short cut way to add all your Service Manager users to be able to see and user certain categories. Again this should be used in conjunction with the copy visibility functions to extend the settings to structure below.



A common mistake is to forget to switch on or copy visibility rights within the category structures you create. This hides all or some of the categories you have created from your Service Manager users.

Preferences \ Service Manager Settings \ Priority

Visible	Order	Name	Colour	Delete
<input checked="" type="checkbox"/>	1	Urgent		Delete
<input checked="" type="checkbox"/>	2	High		Delete
<input checked="" type="checkbox"/>	3	Medium		Delete
<input checked="" type="checkbox"/>	4	Low		Delete
<input checked="" type="checkbox"/>	5	Ultra		Delete

When Service Requests are made, the end user can specify a priority level they want to associate with their request.

The system allows you to create your own priority levels. These can be linked to Service Level Agreements and Routing rules to aid the automation of the system.

To create a new Priority field, simply enter a new name in the 'Create a new priority' text box and click the Create button.

If you want to make the priority visible to Service Manager users, click the entry in the visible column. You can also select the colour code you want to use by clicking the list box under the Colour column.

Visible	Order	Name	Colour	Delete
<input checked="" type="checkbox"/>	1	Urgent		Delete
<input checked="" type="checkbox"/>	2	High		Delete
<input checked="" type="checkbox"/>	3	Medium		Delete
<input checked="" type="checkbox"/>	4	Low		Delete
<input checked="" type="checkbox"/>	5	Ultra		Delete

Hidden priority levels could be used as staging posts for escalated service requests if required (service requests are escalated as part of your SLA regime).

Finally, if you need to delete an entry from the table, simply click the Delete link against the appropriate row.

Why add to the priorities list?

There is a reasonable case for additional priority levels in order to match the needs of your environment. One of the key features of the CSE Service Manager system is its ability to allow its function to expand beyond the traditional ICT-based service desk system.



Creating specific priorities and selecting colour codes can be of great benefit in highlighting service requests within table views. For instance, at CSE, we use different priorities and colours to assign to certain type of service request so they stand out. We have a priority called SR Closed – highlighted in dark blue, so within a table view of all Service Requests on our system we can see at a glance that an SR is closed.

One of our TerraStations is beeping and has a disk error	Hardware	In Progress	L.Greenway	High	22 hours ago	CSE Technical Support SLA
We need a new keyboard for HP ProBook 4530s	Hardware	Closed	L.Greenway	SR CLOSED	23 hours ago	CSE Technical Support SLA
Screen has lines all over it	Hardware	On Hold	L.Greenway	Low	23 hours ago	CSE Technical Support SLA
Screen has multicoloured lines on it	Hardware	On Hold	L.Greenway	Low	23 hours ago	CSE Technical Support SLA
DD needed	Hardware	Closed	L.Greenway	SR CLOSED	23 hours ago	CSE Technical Support SLA
Keyboard has missing keys	Hardware	Closed	L.Greenway	SR CLOSED	23 hours ago	CSE Technical Support SLA
Warranty question	Hardware	Open	L.Greenway	Low	23 hours ago	CSE Technical Support SLA
Question about server IP address	General Networking Queries	Closed	R.Beale	SR CLOSED	23 hours ago	CSE Technical Support SLA
Server manager client crashing	CSE Software	On Hold	R.Beale	Medium	1 day ago	CSE Technical Support SLA

Preferences\Service Manager Settings\Custom Fields

Custom fields can be used to gather information from users that maybe unique to your organisation. For example you may require a registration number to allow users to send support requests, This can be added.

Double click a cell to edit

ID	Visible	Order	Field Name	Is Required	Is Email	Is Number	Is Anything
1	<input checked="" type="checkbox"/>	1	Phone Number	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
2	<input type="checkbox"/>	2	Alt Email	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<input checked="" type="checkbox"/>	3	Location	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
4	<input type="checkbox"/>	4	Extra1	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
5	<input type="checkbox"/>	5	Extra2	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	<input type="checkbox"/>	6	Extra3	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
7	<input type="checkbox"/>	7	Extra4	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
8	<input type="checkbox"/>	8	Extra5	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
9	<input type="checkbox"/>	9	Extra6	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	<input type="checkbox"/>	10	Extra7	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Save Changes **Undo Changes**

ID	Visible	Order	Field Name	Is Required	Is Email	Is Number	Is Anything
1	<input checked="" type="checkbox"/>	1	Phone Number	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
2	<input type="checkbox"/>	2	Alt Email	<input checked="" type="checkbox"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<input checked="" type="checkbox"/>	3	Location	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
4	<input checked="" type="checkbox"/>	4	Department	<input checked="" type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
5	<input checked="" type="checkbox"/>	5	Block	<input type="checkbox"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>
6	<input checked="" type="checkbox"/>	6	Network Port	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
7	<input type="checkbox"/>	7	Extra4	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
8	<input type="checkbox"/>	8	Extra5	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
9	<input type="checkbox"/>	9	Extra6	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
10	<input type="checkbox"/>	10	Extra7	<input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

Save Changes **Undo Changes**

It is always a challenge to get the right information collected when asking users to input data on a form.

The Custom Fields setting allows you to create your own data fields and specify whether the data is mandatory or not.

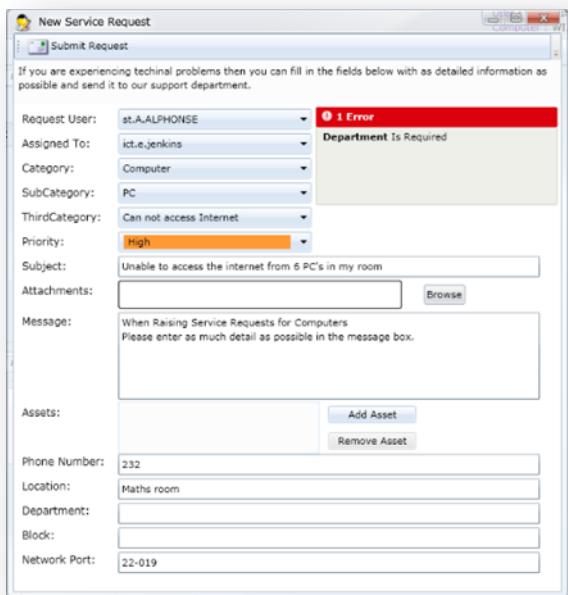
To switch on a custom field, first tick the corresponding option under the 'Visible' column.

Then edit the field name by clicking the entry and entering your required field name.

If you want to force the user to enter data into this field, before allowing the Service Request to be posted, put a tick into the associated 'Is Required' box.

Finally, you can set the data type you are expecting. 'Is Email' expects an entry that follows normal email address conventions, 'Is Number' expects a number and 'Is Anything' is just that - anything can be entered.

When you have created your custom fields, click the **Save** button.



The screenshot shows the 'New Service Request' window. At the top, there is a 'Submit Request' button and a note: 'If you are experiencing technical problems then you can fill in the fields below with as detailed information as possible and send it to our support department.' Below this, there are several dropdown and input fields:

- Request User: at.A-ALPHONSE
- Assigned To: ict.e.jenkins
- Category: Computer
- SubCategory: PC
- ThirdCategory: Can not access Internet
- Priority: high
- Subject: Unable to access the internet from 6 PC's in my room
- Attachments: (empty input field with 'Browse' button)
- Message: When Raising Service Requests for Computers
Please enter as much detail as possible in the message box.
- Assets: (empty input field with 'Add Asset' and 'Remove Asset' buttons)
- Phone Number: 232
- Location: Maths room
- Department: (empty input field)
- Block: (empty input field)
- Network Port: 22-019

A red error box is displayed at the top right, containing the text '1 Error' and 'Department Is Required'.

Looking at the Service Request form, the new custom field is present. Here we have tried to save the request without entering anything in the Department field. Note in the screenshot the Department field is clearly marked as being required.

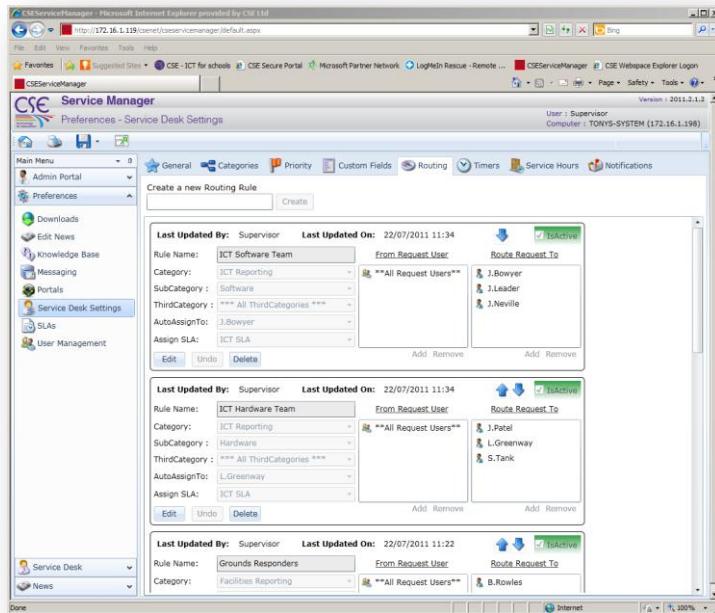
The New Service Request form will not allow end users to submit a request unless all mandatory fields are populated. The error indicator clearly shows that the error is because the Department field needs to be populated.

Preferences \ Service Manager Settings \ Routing



Routing rules are a very important construct within Service Manager as they help automate the workflow within the system. Usually, routing rules are always associated with SLAs (Service Level Agreements).

Routing is one of two areas where we can start adding some automation to the way service requests are handled and passed on to Service Responders. Routing and SLAs (Service Level Agreements) really go hand in hand. Routing allows you to automatically filter specific Service Requests, and pass them on to Service Responders (Technicians) for their attention and processing.



There are two parts to this, firstly, a routed request is visible to those responders in the list.

By default, everything is routed to the Service Manager administrators, who can then review the requests, then manually process them and assign the tasks to individual technicians.

This is not very efficient, as you can probably appreciate. The routing system allows you to create rules that route calls to other individuals. You can also directly assign calls to an individual by setting the auto assign field. This bypasses the manual screening and assignment processes. So if you have a technician who is an expert on SIMS, then all SIMS related service requests could be automatically routed and assigned to them.

You will also notice that each routing rule is associated with a named SLA. We will cover this in later in this chapter when we explore SLAs.

Please note that the default routing rule assigned to the Default SLA cannot be deleted: it routes all service requests to all Service Manager Administrators as a default action.

Routing rules have a hierarchy, put simply – rules are processed by the order in which they appear in the table.

Last Updated By: supervisor Last Updated On: 16/06/2012 13:18		Route Request To	
Rule Name:	General Technical Calls	From Request User	  <input checked="" type="checkbox"/> IsActive
Category:	*** All Categories ***	 **All Request Users**	
SubCategory :	*** All SubCategories ***	 **All Technicians**	
ThirdCategory :	*** All ThirdCategories ***	T.Saxby	
AutoAssignTo:			
Assign SLA:	Default		
Edit Undo Delete		Add Remove	

Last Updated By: supervisor Last Updated On: 16/06/2012 13:20		Route Request To	
Rule Name:	VLE Support Calls	From Request User	  <input checked="" type="checkbox"/> IsActive
Category:	Software	 **All Request Users**	
SubCategory :	VLE	 **All Technicians**	
ThirdCategory :	*** All ThirdCategories ***		
AutoAssignTo:	M.Land		
Assign SLA:	Default		
Edit Undo Delete		Add Remove	

Last Updated By: supervisor Last Updated On: 16/06/2012 13:20		Route Request To	
Rule Name:	SIMS Support Calls	From Request User	 <input checked="" type="checkbox"/> IsActive
Category:	Software	 **All Request Users**	
SubCategory :	SIMS	 **All Technicians**	
ThirdCategory :	*** All ThirdCategories ***		
AutoAssignTo:	M.Graham		
Assign SLA:	Default		
Edit Undo Delete		Add Remove	

Here we have 3 routing rules, in the order that they appear in the table. By convention the rule at the top of the list is processed first, then requests fall down the list to be processed by the other rules below.

In this example look at the first rule. It applies to all service requests entered into the system: see how all the filter are set to **All XXXX**.

This means that irrespective of the other routing rules below – this rule will always grab every single service request entered into the system.

This obviously is wrong as it destroys the logic behind the other rules that have been entered. The solution is to change the order in which the routing rules appear within the hierarchy. To do this use the blue up/down arrows to change the rules position.

Now the general 'catch all' rule is at the bottom of the list, and the rules above can effectively filter the service requests correctly and apply the appropriate settings to it.

Last Updated By: supervisor Last Updated On: 16/06/2012 13:20		Route Request To	
Rule Name:	VLE Support Calls	From Request User	  <input checked="" type="checkbox"/> IsActive
Category:	Software	 **All Request Users**	 **All Technicians**
SubCategory :	VLE		
ThirdCategory :	*** All ThirdCategories ***		
AutoAssignTo:	M.Land		
Assign SLA:	Default		
Edit Undo Delete		Add Remove	

Last Updated By: supervisor Last Updated On: 16/06/2012 13:20		Route Request To	
Rule Name:	SIMS Support Calls	From Request User	  <input checked="" type="checkbox"/> IsActive
Category:	Software	 **All Request Users**	 **All Technicians**
SubCategory :	SIMS		
ThirdCategory :	*** All ThirdCategories ***		
AutoAssignTo:	M.Graham		
Assign SLA:	Default		
Edit Undo Delete		Add Remove	

Last Updated By: supervisor Last Updated On: 16/06/2012 13:18		Route Request To	
Rule Name:	General Technical Calls	From Request User	  <input checked="" type="checkbox"/> IsActive
Category:	*** All Categories ***	 **All Request Users**	 **All Technicians**
SubCategory :	*** All SubCategories ***		
ThirdCategory :	*** All ThirdCategories ***		
AutoAssignTo:			
Assign SLA:	Default		
Edit Undo Delete		Add Remove	

Creating a new Routing Rule

We recommend that you only use the global view of routing rules that this function provides to look up rules and to manage the hierarchy. The proper place to create new and edit routing rules is under the SLA section, and that is covered in more details later in this chapter.

Preferences/Service Manager Settings/Timers

Service Manager has a number of system timers that are available for you to use. One of these timers is fixed and cannot be changed. This timer starts as soon as a Service Request is raised and stops when the request is closed. However, it also 'pauses' whenever the Service Request is put on hold. This is because putting a Service Request on hold temporarily suspends action on the request and it is appropriate to halt the system timer.



Timers play a very important role in measuring your service desk's performance against published SLAs. The system supports the use of timers in the generation of SLA measurement reports. Where you can create custom reports that compare and score your systems performance against SLA KPIs (Key Performance Indicators). This will be discussed and described in a later chapter.

There are also four additional timers available, these timers are completely user configurable. These timers are designed to allow you to create your own set of rules to measure your own internal processes and targets.

Take for instance the situation where you have a faulty piece of equipment that requires a third party maintenance company to collect, repair and return to you. Whilst the equipment is away it is appropriate to stop the clock by putting the request on hold. The main system timer does this for you. However, you might want to be able to measure the time that the equipment is away. You can achieve this by creating a custom timer to start when the request is on hold and stop when the equipment is returned and put back in service and the request is closed.

ID	Name	Start Timer	Stop Timer	Updated By	Updated
1	SystemMainTimer	<code>\$(Status) ISNOT {Closed} AND \$(Status) ISNOT {On Hold}</code>	<code>\$(Status) = {Closed} OR \$(Status) = {On Hold}</code>	Administrator	13/04/2010 10:36:58
2	Time to Repair	<code>\$(Status) = {Open}</code>	<code>\$(Status) = {Closed}</code>	Administrator	15/04/2010 12:00:00
3	Time to Respond	<code>\$(Status) = {Open}</code>	<code>\$(Status) = {In Progress}</code>	Administrator	13/04/2010 10:46:22
4		not defined	not defined		
5		not defined	not defined		

The timer rules are controlled by logic switches based on values or states of database variables. To facilitate to correct format of these logic rules, we have developed a rule builder that ensures that the logic statements are entered correctly and are properly formatted.

The System Main Timer cannot be changed: if you attempt to edit it a warning message will be issued. However, it is a good example to demonstrate the logic statement that controls the switching on and off of the timer.

Timer Start

`${Status} ISNOT {Closed} AND ${Status} ISNOT {On Hold}`

Timer Stop

`${Status} = {Closed} OR ${Status} = {On Hold}`

If the Service Requests status is neither Closed nor On Hold, the system timer will run. If, however, the requests status is either Closed or On Hold, the timer will stop.

Timer DB Variables

- `${Status}` - returns the Service Requests status (Open, In Progress, On Hold or Close)
- `${Category}` - returns the Service Requests primary category {values returned depend on what has been setup by the Service Manager administrator}
- `${Sub Category}` - returns the Service Requests sub category {values returned depend on what has been setup by the Service Manager administrator}
- `${Third Category}` - returns the Service Requests third category {values returned depend on what has been setup by the Service Manager administrator}
- `${IsAfterHours}` - returns {True or False}
- `${Priority}` - returns the Service Requests priority setting values returned depend on what has been setup by the Service Manager administrator}

Status and IsAfterHours return fixed values. All other variables will return values that correspond to the settings configured by the Service Manager administrator when the system was setup and configured.

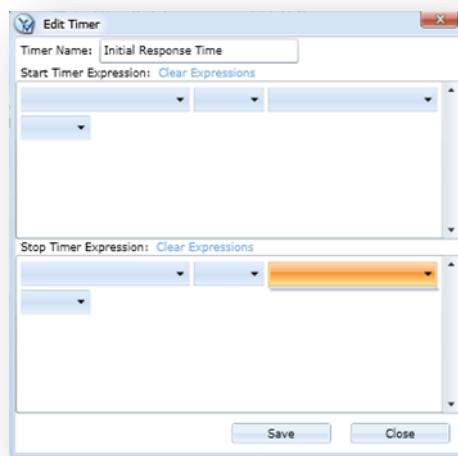
Logic Operators

- IS NOT - value 1 is not the same as value 2
- = - Value 1 is the equal to value 2
- < - Value 1 is greater than Value 2
- Value 1 is less than Value 2
- AND - used to join statements together where both conditions need to be satisfied
- OR - used to join statements together but where one or the other conditions need to be satisfied

Creating your own timer using the Logic Builder

The first task is to work out what conditions you want to create the timer to measure. In this example let's us look at what we would call the Initial Response Time. In the normal flow of events, when a Service Request is entered onto the system, the request's status will be set initially to 'Open'. This means that the request is on the system, visible to the system administrators and technicians. It does not mean that anybody has started working on it yet, or possibly even looked at it.

When the administrator or technicians start work on investigating a request, they will change the request's status from 'Open' to 'In Progress', indicating that they have seen the request and have started to work on it. So, the difference between the request being 'Opened' and the status changing to 'In progress' can be used to measure the initial response time.

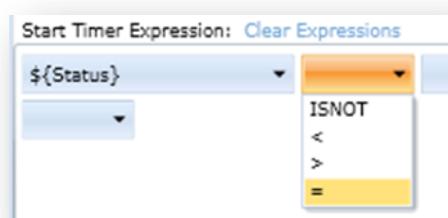
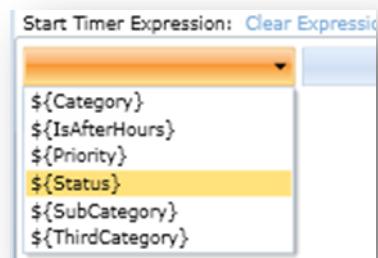


To create (or for that matter edit) a custom timer double click an empty row within the timer table, this will start the logic builder.

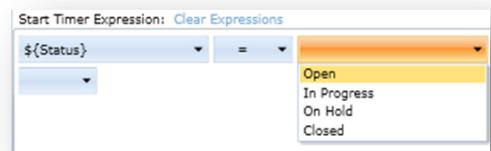
Enter the timer's name in the box provided.

Now we are ready to build the logic expression that will start the timer.

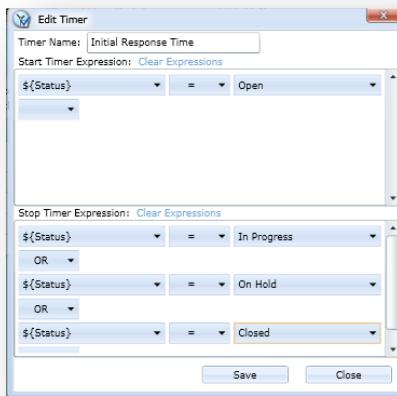
Use the list box and select the first part of the logic expression, in this case we want to select the 'Status' variable.



Next we want to select the operator, in this case we want to use the = (equal) operator.



Finally, we need to select the condition value from the final list box. It is worth pointing out that the logic builder will only display the available values for the expression selected.



The next task is to create the expression that will stop the timer.

Rather than go through the logic builder a step at a time, the illustration to the left shows the completed expression for stopping the timer.

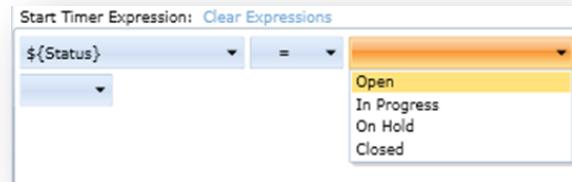
By using the OR statement, we have added additional logic statements to our expression. The timer will start when the service request is set to 'open', and will stop when the status is either marked as being 'In Progress' or 'On Hold' or 'Closed'

Basically this timer will only remain running when this service request's status field is 'open'

There is actually a much simpler expression that could be used to trigger the stop timer expression. But we wanted to demonstrate how you can string together logic expressions using the AND/OR operators.

The `${Status} ISNOT Open` expression does exactly the same thing as the rather more complicated expression above!

The Logic Builder will walk you through building the expression that you want and will ensure that your logic expressions will be correctly formatted.



Timer Restrictions

There is a small restriction in terms of the way the timers operate. Because the Service Manager system is applying these timers multiple times across possibly hundreds of active Service Requests, the server-based process that does this could get overloaded and potentially slow down the system. To prevent this from happening the process that updates the timers runs once every 5 minutes or so.

Also, since the timers are running relative to a time stamp within each Service Request record, they can quite happily deal with server being taken down and switched off. When the server restarts, the timers can calculate the elapsed times correctly.

Viewing and Interacting with Timers

ID	Timer Name	Timer Value	Timer Code	Timer Action
1	SystemMainTimer	0 day(s) 1 hr(s) 5 min(s) 1 sec(s)	SystemStart	
2	Initial Response Time	0 day(s) 1 hr(s) 5 min(s) 1 sec(s)	SystemStart	
3	Time to Repair	0 day(s) 0 hr(s) 0 min(s) 0 sec(s)	SystemStop	
4		0 day(s) 0 hr(s) 0 min(s) 0 sec(s)	None	
5		0 day(s) 0 hr(s) 0 min(s) 0 sec(s)	None	

Each Service Request entered into Service Manager will have timers associated with it.

They can be accessed by opening an individual Service Request and clicking on the Timers tab.

Only Service Manager administrators and technicians have access to the timers tab.

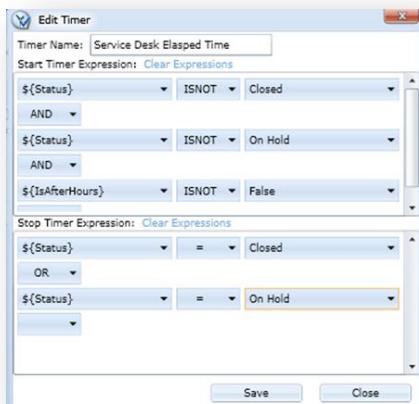
End users do not have access to the History, Notifications or Timers tabs.

As you can see from the above screenshot, each timer in the list displays its value and a timer code.

The timer code is an indication of what it is currently doing. The code values are:

- *SystemStart* - the timer is running and was started by the system
- *SystemStop* - the timer is stopped and was stopped by the system
- *ManualStart* - the timer is running, but it was started manually
- *ManualStop* - the timer is stopped, but it was stopped manually
- None - The timer is not operational.

The Timer Action column allows you to manually intervene and start and stop the timer. If the timer is running, then clicking the icon will stop it, whilst if the timer is stopped you can click the icon and start it. In both instances the Timer Code will change to indicate that the operation has been initiated manually.



Further Custom Timer Example

The system main timer starts as soon as a service request is entered, is paused when the request is put on hold and stops when the status changes to closed. It does not take into account that the service desk is closed at night and at weekends. You might therefore want to introduce a timer that takes into account the service desk's office hours.

Here we want a timer that starts when a request is entered, pauses when the call is on hold, pauses when the service desk is closed and stops when the request's status changes to Closed.

We have defined a timer called 'Service Desk Elapsed Time'. The timer will be running as long as the call's status is not set to Closed or On Hold and the service desk is actually open for business.

The timer is stopped when the request is Closed or put On Hold.

Timers have other useful uses that come into play with SLA functions and the ability to create measurement items based upon their values. We will cover this later in the chapter.

Preferences/Service Manager Settings/Service Hours

It is normal practice for service desks to have opening hours.

Take an example where a member of staff logs a service request last thing on Friday, after the service desk team has gone home and the service desk is closed. It would be inappropriate for the SLA timers to start to kick in immediately because there is not going to be anyone available until Monday morning.

Days	Open	Close
Monday	08:00	17:00
Tuesday	08:00	17:00
Wednesday	08:00	17:00
Thursday	08:00	17:00
Friday	08:00	17:00
Saturday	08:00	17:00
Sunday	08:00	17:00

Exclude Dates

From	To
24/12/2010	26/12/2010

Save Changes | Undo Changes

By defining the Service Desk Hours, you can stop SLA timers during the closed hours.

The system allows you to define the open and closed times for each day of the week.

You can also add block dates to an exclusion list, allowing half-term and end-of-term holidays to be excluded.

When you make any changes, remember to click the **Save Changes** button.

Preferences/Notifications

A core function of Service Manager is the way in which transactions can trigger email notifications that inform the various parties that an action or process has affected a service request that is of interest to them. There are two methods by which a notification can be triggered as an automated response in relation to general system action, such as notifications sent when a new service request is entered, or a service request being updated (modified). Typically these notifications are sent to the requestor to keep them informed of the progress of their request, when it has been update or modified, and to the technicians who have been assigned the request and are expected to resolve the issue.

The second level occurs when an SLA has triggered. If you have an SLA that states that all new service requests should be actioned within eight hours, you can trigger an SLA response and send notification emails telling people that a request should be looked at urgently because an SLA has been missed.

This section looks at the autonomous notification responses, SLA-triggered notifications are covered in a later section.



If you have used a previous version of Service Manager, you will notice that the method of messaging is significantly different. The new system has been upgraded and is now totally rules-based. This gives much greater control over how and when notifications are used.



The new notification system also has significant cross over with Asset Manager and the room booking system.



For the purposes of this manual, we will be addressing the way in which the notification system interacts with the Service Manager process. You can manage and control notification emails when service requests updated by the system, both manually and automatically. Notifications utilised by Asset Manager and the room booking system will be addressed in the appropriate documents.

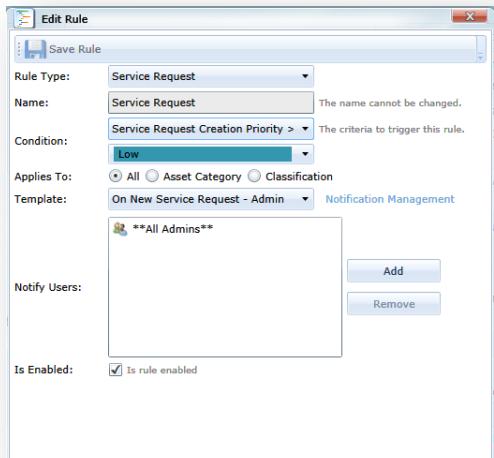
On first sight, the notifications system can look complicated, but it does break down by specific function, such as 'Service Request', where all notification rules specific to the service desk functions grouped together.

Rule Type	Name	Condition	Criteria	Applies To	Notification Template	Notify	Enabled	Updated	Updated By
Asset	Asset Creation			All	On New Asset - Admin	GRP1**All Admins**		09/02/2012 21:32:52	Administrator
Asset	Asset Modified			All	On Asset Change - Admin	GRP1**All Admins**		09/02/2012 21:36:53	Administrator
Asset	Asset Creation			All	On New Asset - Creator	USR1**Asset Creator**		09/02/2012 22:34:08	Administrator
Asset	Asset Modified			All	On Asset Change - Creator	USR1**Asset Creator**		09/02/2012 22:34:08	Administrator
Booking	Booking Creation			All	On New Booking - Admin	GRP1**All Admins**		09/02/2012 21:37:34	Administrator
Booking	Booking Modified			All	On Booking Change - Admin	GRP1**All Admins**		09/02/2012 21:36:12	Administrator
Booking	Booking Creation			All	On New Booking - Booking User	USR1**Booking user**		09/02/2012 22:36:01	Administrator
Booking	Booking Modified			All	On Booking Change - Booking User	USR1**Booking user**		09/02/2012 22:36:01	Administrator
Booking	Booking Reminder			All	Booking Reminder - Booking User	USR1**Booking user**		09/02/2012 22:18:17	Administrator
Booking	Booking Deleted by User			All	User Deleted Booking	USR1**Booking user**		10/02/2012 12:35:24	Administrator
Booking	Booking Deleted by TimeTable			All	Booking Deleted by TimeTable	USR1**Booking user**		10/02/2012 12:42:29	Administrator
Disk	Any Disk	In < 5% free		ACLA-Computer	Disk is < 5% free	GRP1**All Admins**		09/02/2012 21:49:10	Administrator
Disk	Any Disk	In < 30 MB free		ACLA-Computer	Disk has < 30MB free	GRP1**All Admins**		11/02/2012 00:29:25	Administrator
Printer Supply Level	Printer Supply Level	In < 10%		ACLA-Printer	Printer Supply Level	GRP1**All Admins**		11/02/2012 00:19:06	Administrator
Service Request	Service Request	Service Request Creation Priority >= 4		All	On New Service Request - Admin	GRP1**All Admins**		09/02/2012 21:37:27	Administrator
Service Request	Service Request	Service Request Modified		All	On Service Request Change - Admin	GRP1**All Admins**		09/02/2012 21:37:49	Administrator
Service Request	Service Request	Service Request Creation Priority >= 4		All	On New Service Request - Requester User	USR1**Request user**		09/02/2012 22:34:22	Administrator
Service Request	Service Request	Service Request Modified Fields \$((Status)),\$((AssignedTo)),,\$(Notes)		All	On Service Request Change - Requester User	USR1**Request user**		09/02/2012 22:40:40	Administrator
Service Request	Service Request	Service Request Modified		All	On Service Request Change - Assigned	USR1**Assigned To User**		09/02/2012 22:39:15	Administrator
Service Request	Service Request	Service Request Modified		All	On Service Request Change - Router/Def	GRP1**Router/Def user**		09/02/2012 22:39:15	Administrator
Software	Any Software	is not compliant		ACLA-Computer	Software Not Compliant	GRP1**All Admins**		11/02/2012 00:30:09	Administrator

Service Desk Notification Rules

The new notification system is rules based and allows you to construct rules that managed the handling of emails that are sent notifying your users when a trigger event has occurred. Server manager routinely scans through all service requests and checks to see if the various rule conditions have been met. If a rule is triggered, then specified notification email is generated and sent to those in the notification list.

There are a number of 'default' rules that are designed to handle the standard and routine notification tasks, such as informing people that a new service request has been entered on to system, or that a service request has been closed.



The purpose of this rule is to send an email to all the service desk administrators when a new service request is entered onto the system.

The logic behind this rule is simply to trigger when a new request with a priority of greater than or equal to **Low** is discovered. Since the Low Priority field is the lowest value within the priority range, this means it will always trigger when a new SR is created – irrespective of what value has been applied to the priority field.

All newly entered service requests will trigger this rule and therefore send a notification email to the service desk administrators.



You might consider that it is appropriate to email notifications to all service desk administrators every time a new service request is entered by an end user. However if you are operating a busy service desk where dozens of service requests are entered every day, this could swamp administrators' mailboxes with messages.

The problem is that if an individual starts to get hundreds of messages a week relating to new service requests, it is likely that they will start to ignore them after a while. This does represent something of a dilemma and you will need to consider whether this is appropriate to your operational needs.

All we can do is provide a basic set of rules and advise that they are used and modified in such a way as to make them usable within your organisation.

You can always edit any of the default rules. You also have the option of disabling them, or even deleting them altogether.

Building Service Desk Notification Rules

Rule Type

Because of the multi-purpose nature of the notification system, the rule type field specifies the general classification of the rule. The list of available rule types is very extensive and covers functions appropriate to the service desk, asset management and room booking functions. As stated before, in this section we are only interested in circumstances relating to the management of service requests. In this case, the rule type is *Service Requests*.

Name

This field is fixed and when a Service Request rule type is selected, it will be set as Service Request. You cannot edit or change this.

Trigger Criteria

There are four trigger criteria related to service requests,

- Service Request Creation
- Service Request Creation Priority >=
- Service Request Modified
- Service Request Modified Fields

We will look at each of these in more detail a little later.

Applies To

This allows you to manage the context applied to the triggering mechanism. There are three options available – *All*, *Asset Category* and *Classification*.

- *All* – as its name suggests applies to all service requests entered.
- *Asset Category* is not appropriate in this setting as it applies to the Asset Manager system
- *Classification* is not appropriate in this setting as it applies to the Asset Manager system.

Template

This allows you to select the email template to use. We will look at email templates in greater detail later, but in essence the template is the body of the email message that will be sent.

Notification Management

This allows direct access to the notification management controls, which we will look at later in the manual.

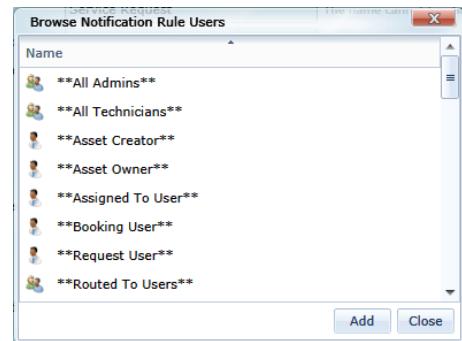
Notify Users

This allows you to select the users or groups of users that this notification will be sent to.

There are some special groups available that can be selected which are defined automatically by the system.

Appropriate to the service desk function are:

- **All Admins **
- **All Technicians**
- **Request User**
- **Routed To Users**



The first two represent the management users defined when Service Manager was configured. Request User is the person who entered the service request, and routed to users relates back to the users that the system has routed the request to (via an appropriate routing rule).

You can also select individual users from the list that appears.

Is Enabled

This option allows you to switch the rule on or off.

Service Desk Triggers

Service Request Creation

This is a basic rule that will trigger whenever a new service request is processed.

Service Request Creation Priority >=

This rule extends the scope by allowing you to specify that a secondary condition be required to trigger this notification: in this instance, this is the service requests priority level.

You can select the priority level from the pull-down menu. In this way, you can build notification triggers that generate emails when processing high or urgent priority service requests.

Service Request Modified

This is a basic rule that will trigger whenever an end user or technician updates a service request.

Service Request Modified Fields

This rule extends the scope by allowing you to specify that a secondary condition be required to trigger this notification, in this instance, you can specify it to monitor which service request fields have changed.

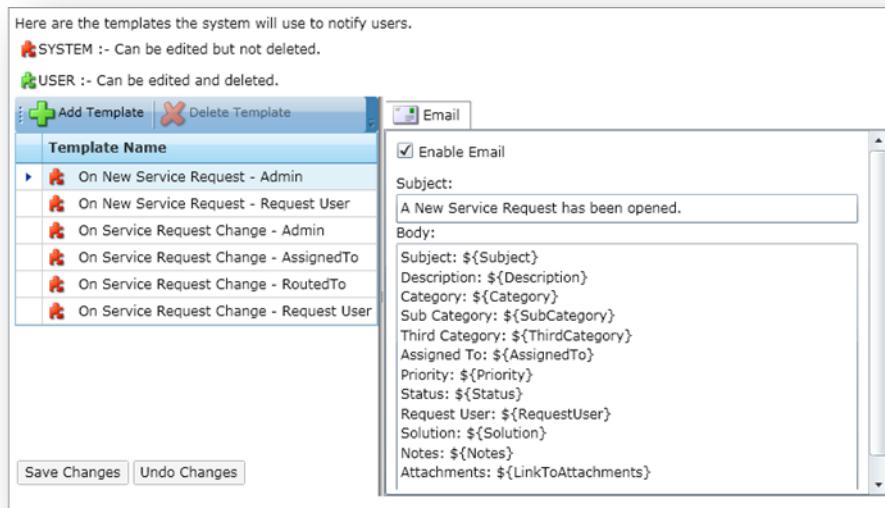
For instance if you want to monitor and trigger notifications whenever the status of a request changes (open/in progress/on hold or closed), \${Status} is the variable tag you need to monitor.

A list of all the variable tags available is in the Notification Templates section of this manual.

Notification Templates



The Service Manager Notification system allows you to customise email responses that the system automatically sends out whenever a trigger is processed. This unique system allows you to customise the information contained within the email, making it easier to understand.



There are two types of email template: these are the **system** and **user** templates. The system templates are predefined, though you can still change what appears in the body of the email message that is generated. You cannot delete system templates.

User templates, on the other hand, are defined completely by yourself, and they can be deleted if you so wish.

The body of the template message is comprised of a subject header, this is the email's tag line and will appear in the message header. The body of the email is plain text, but can include information regarding the Service Request. These are specified by utilising database variable tags. These generically take the form of \${variable} constructs. The table below shows the currently available variable tags. Please note that tags in italics have not yet been implemented and cannot currently be used.

<i> \${SRID}</i>	The service request identifier.
<i> \${Subject}</i>	The subject of the service request.
<i> \${Description}</i>	The description of the service request.
<i> \${ModifyUser}</i>	The user who modified the service request.
<i> \${Category}</i>	The category of the service request.
<i> \${SubCategory}</i>	The Sub Category of the service request.

<code> \${ThirdCategory}</code>	The Third Category of the service request.
<code> \${AssignedTo}</code>	The user the service request is assigned to.
<code> \${Priority}</code>	The priority of the service request.
<code> \${Status}</code>	The status of the service request.
<code> \${RequestUser}</code>	The user who requested the service request.
<code> \${Solution}</code>	The solution of the service request.
<code> \${Resolution}</code>	The resolution of the service request.
<code> \${Notes}</code>	The notes written in the service request.
<code> \${LinkToAttachments}</code>	Creates a link to download the files attached to the service request.
<code> \${IsAfterHours}</code>	Returns 'true' if the notification is sent outside of operating hours.
<code> \${IsNewSr}</code>	Returns 'true' if this is a new service request.
<code> \${IsSRClosed}</code>	Returns 'true' if this service request is closed.
<code> \${CloseTime}</code>	The time when the service request was closed.
<code> \${RoutedTo}</code>	Showsto whom the service request is routed.
<code> \${LinkToSR}</code>	Creates a link to the service request.
<code> \${Customer}</code>	The customer name of service request.
<code> \${RequestUserPriEmail}</code>	The request user's primary email address.
<code> \${RequestUserMobile}</code>	The request user's mobile number (SMS)
<code> \${SubmitTime}</code>	The time the service request was submitted.
<code> \${SubmitUser}</code>	The user who submitted the request.
<code> \${UpdateTime}</code>	The date and time the service request was modified.
<code> \${Version}</code>	The service request version number.
<code> \${CustomField1Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField1Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField2Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField2Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField3Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField3Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField4Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField4Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField5Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField5Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField6Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField6Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField7Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField7Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField8Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField8Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField9Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField9Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField10Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField10Value}</code>	The value of the custom field associated with the service request.
<code> \${TimersUpdated}</code>	The date and time the timers were last updated for the service request.
<code> \${Timer1Name}</code>	The name of the timer associated with the service request.

<code> \${Timer1Value}</code>	The value of the timer associated with the service request.
<code> \${Timer1Code}</code>	The code of the timer associated with the service request.
<code> \${Timer2Name}</code>	The name of the timer associated with the service request.
<code> \${Timer2Value}</code>	The value of the timer associated with the service request.
<code> \${Timer2Code}</code>	The code of the timer associated with the service request.
<code> \${Timer3Name}</code>	The name of the timer associated with the service request.
<code> \${Timer3Value}</code>	The value of the timer associated with the service request.
<code> \${Timer3Code}</code>	The code of the timer associated with the service request.
<code> \${Timer4Name}</code>	The name of the timer associated with the service request.
<code> \${Timer4Value}</code>	The value of the timer associated with the service request.
<code> \${Timer4Code}</code>	The code of the timer associated with the service request.
<code> \${Timer5Name}</code>	The name of the timer associated with the service request.
<code> \${Timer5Value}</code>	The value of the timer associated with the service request.
<code> \${Timer5Code}</code>	The code of the timer associated with the service request.

System Mail Templates

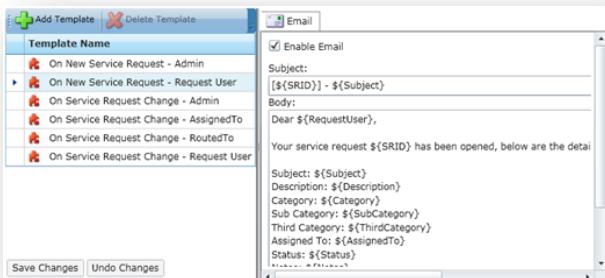
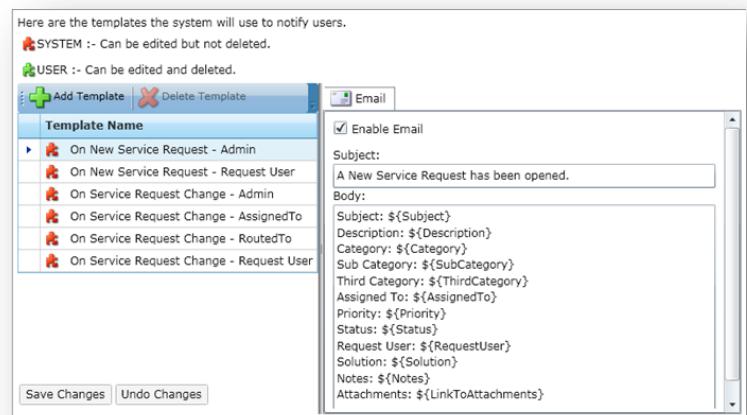
There are six pre-defined Service Request email templates available by default. You cannot delete any of the system notifications, but you can edit the template. System Notifications control system events. For instance when a request is first entered or when a requests status field changes.

You need to 'enable' each of the templates that you want to use by selecting the Enable Email option. We would recommend that you carefully consider the various options and only switch on those that will be most useful to you. Otherwise you do run the risk of a situation where too many irrelevant and unhelpful email messages get sent.

On New Service Request - Admin.

This email will be sent to Service Manager Administrators whenever a new Service Request is raised.

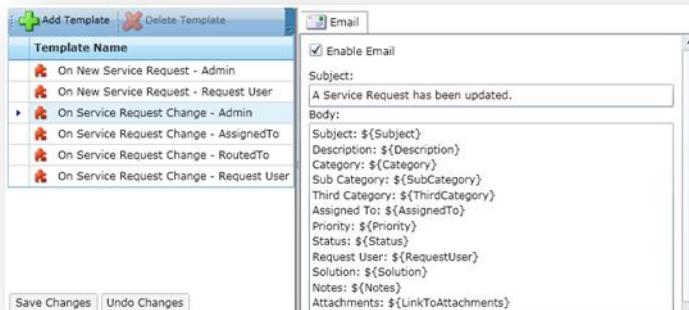
It is designed to attract the administrator's attention so that the request can be assigned to a technician.



On New Service Request - Request User.

This template defines the email that is sent to the user who has just entered the new Service Request.

Please note that this also demonstrates the ability to include database variable tags in the subject header.

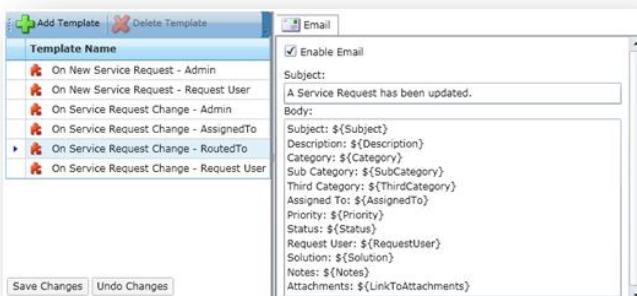
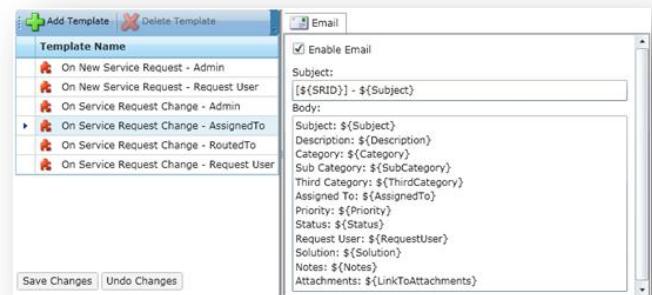


On Service Request Change - Admin

Whenever a Service Request changes, either by being updated by a technician or by the end user themselves, this will generate an email message that is sent to the Service Manager Administrator.

On Service Request Change - Assigned to

Whenever a Service Request changes, either by a technician or end user, this will generate an email that is sent to the technician that the Service Request is assigned to.



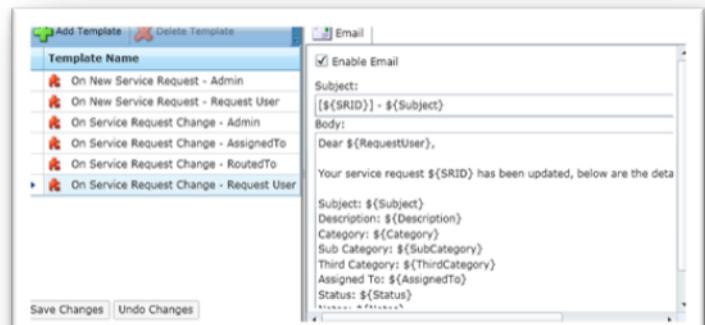
On Service Request Change - Assigned To

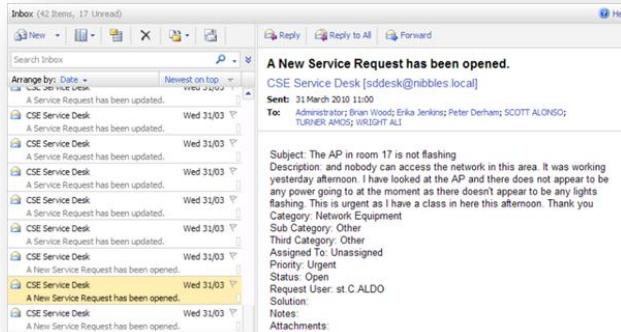
Earlier in this chapter we examined the automatic routing of Service Requests using routing rules.

Whenever a Service Request is changed, either by a technician or end user, this will generate an email that is sent to the technician that the Service Request has been automatically routed to.

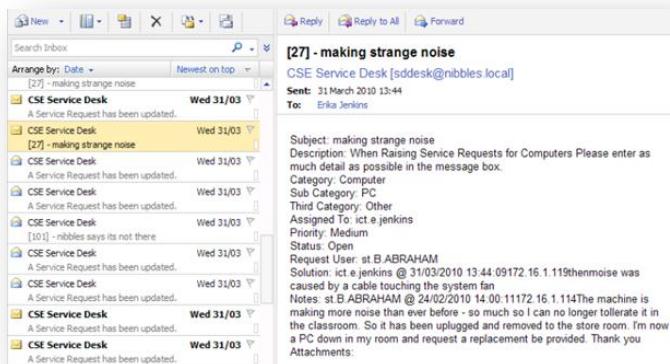
On Service Request Change - Request User

Whenever a Service Request is changed, either by a technician or end user, this will generate an email that is sent to the requesting user.





This is an example of the email that is generated when a new Service Request has been raised by an end user. The body of the message contains all the relevant information, as defined by the template.

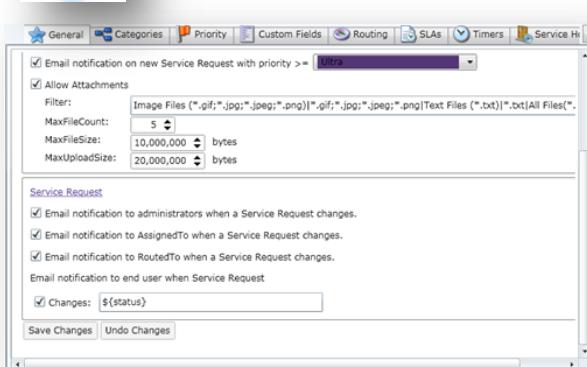


Meanwhile, this message has been generated and sent to the technician who has been assigned by the Service Manager administrator to deal with the issue raised.

The notification system is a very powerful tool to enable you to generate automatic email notifications to both Service Manager technicians and end users, keeping all parties informed of the progress of their Service Requests.



Whenever you make changes to the standard email templates, please remember to press the **Save Changes** button.

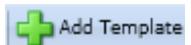


Finally, you will need to go to the Preferences/Service Manager Settings General tab and select the Email options that you want the system to use.

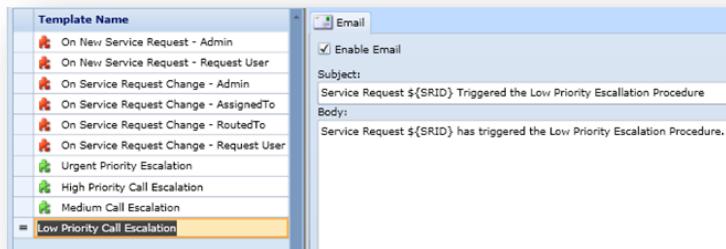
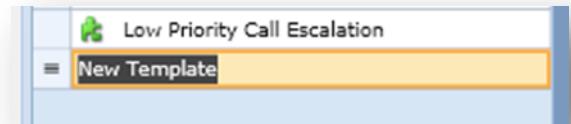
The option setting allows you to create a custom setting that emails whenever a specific tagged variable changes. Here we have specified that an Email message is sent whenever the Service Requests status field is changed. You can string together expressions by separating variables with a comma.

User Defined Notification Templates

User Templates allow you to define your own notifications. These can then be linked to SLA escalation events (see the SLA section earlier in the manual).

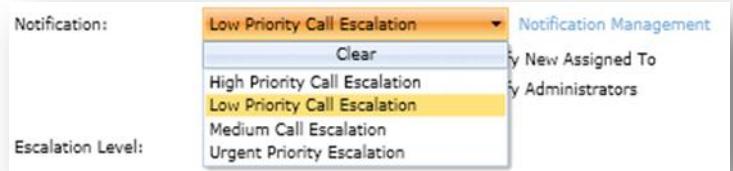
To create a custom notification, click the  button.

Enter the name that you want to assign to the new Notification Template into the text box provided and press enter.



Then enter the subject and email body. Notice that both the Subject and Body fields can contain database tags. In this instance we use \${SRID}, which will insert the Service Request ID number.

If you then look at the SLAs, you will see the user-defined template now appears in the Notification list box.



Notifications are there to keep everybody informed about the process of resolving a service request. Nevertheless, you need to be aware that is all-too easy to create a situation that can overload people's mailboxes with alerts and messages.

Preferences \ SLAs



Users of earlier versions of Service Manager should note that the management and operation of SLAs and Routing Rules have been significantly updated in this version of CSE Service Manager. Our aim has been to provide a more hierarchical structure to SLAs and to improve the measurement and reporting capabilities of the system. This has resulted in a more structured approach to the way in which SLAs and Routing Rules are now created.

What is an SLA?

All service desk systems generally need an element of monitoring and reporting built in to them. This allows processes and outcomes to be measured and tracked against performance targets or Key Performance Indicators (KPIs). There are several reasons why you would want this.

In its most simplistic form, an SLA defines the target time to respond to a customer's request. For example:

- All telephone calls will be answered within 15 seconds.
- All emails will be acknowledged within 30 minutes.
- All software enquiries will be answered within two days.
- All requests to replace toner cartridges will be addressed within two hours.

Each situation therefore has a defined target time to be addressed by, and by defining each of these as an SLA you can monitor your performance against each of these targets.

Why would you want to do this?

- Reporting to senior management.
- Identifying strengths and weaknesses of procedures.
- Measuring staff performance.
- Identifying staff strengths and weaknesses
- Helping to identify trends and problem areas

In any situation where an SLA is defined, it provides the benchmark by which process performance can be measured.

So, creating an SLA allows me to track my staff's performance?

From a pure management perspective – yes! But to think of SLAs purely as a management reporting tool ignores the many other benefits Service Manager provides.

What else do they do?

Properly constructed SLAs can significantly assist you by automating many Service Manager procedures.

How does this work?

Take for instance a situation involving interactive whiteboards (IWBs). You have a member of your team who has been fully trained and is up to speed with all aspects of IWB operation and software, so much so that they are the 'go-to' person whenever there is any issue with these devices.

The IWB SLA can be configured in such a way that as soon as an IWB request is raised, the request is automatically assigned to that person and an email is sent to them containing the service request details. If that person fails to respond within prescribed timeframes, then the service request is escalated up a priority level and a reminder email sent to the person assigned to the job with a copy to their manager. The fact that a target response has been missed is automatically recorded against the service requests history, and a record of the emails sent is recorded in the notification history.

All these operations take place automatically, significantly reducing the management time that would be required to duplicate the process manually. An SLA doesn't forget that a request needs action!

It seems that I might need more than one SLA

This is true. As you assess the services that you provide to your end users, you will quickly realise that many of the processes and procedures that you and your team perform have different timescales applied to them.

One of the advantages of creating and maintaining SLAs to cover these is that this effectively documents the responses expected in any given situation. Staff become aware of their individual responsibilities given any situation and will be secure in their ability to deliver efficient service levels to end users.

Getting Started with SLAs

By default, Service Manager has one predefined SLA, and all incoming service requests are assigned to it. This SLA cannot be deleted. Think of the Default SLA as a switchboard: its primary purpose is to filter and pass service requests on to other SLAs that you define.

The default SLA has a default routing rule applied to it: all categories of service requests, entered by any end user are routed to all service desk administrators. This default routing rule is always active and the rule itself cannot be deleted. There are no pre-defined escalation rules applied to this SLA.

Any service request entered into the system will therefore automatically be assigned to the Default SLA, and the service desk administrator users will have the service request routed to them.

No other automated actions will be performed, unless of course you add your own routing and escalation rules.

Planning

The first task is to analyse the structure of your support services, and determines just how many SLAs you might need to create. For instance you may identify the following broad categories that need defined SLAs:

- Hardware issues
- Software issues
- Internet issues
- Printing issues
- Change requests (create new user/change password/install new software).

For the purposes of providing an example to work through, we will look at the way we might create an SLA that deals with hardware issues.

If you sit down and analyse hardware-related issues, you are likely to come up with a scenario that is not dissimilar to that described below.

- There are certain pieces of equipment that are mission critical, and without them the day-to-day functioning of the school is in risk. Obviously any server failure will fall into that category, but the bursar's or head's PCs may also fall into that category.
- There are hardware issues that are likely to cause major disruption to the process of teaching within a classroom. Whilst these are less urgent than the issue described above, they still to be investigated and resolved quickly.
- There are much less critical issues that can wait a longer period before being investigated. For instance one computer in a classroom is not working, and whilst this might be inconvenient, it is neither critical nor urgent, as there are other computers available that can be used.

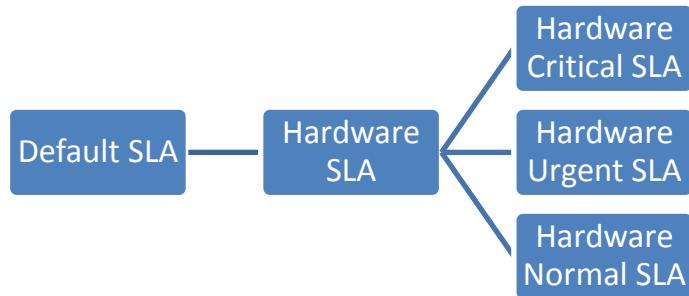
We have therefore identified three priority levels when it comes to hardware-related issues. There are probably more that could be defined, but for the purposes of this illustration we will stick with these examples.

We have here broken hardware-related issues into three categories, Critical, Urgent and Normal. This is a starting point from which we can develop a series of hardware SLAs.

Creating the SLAs

Remember that by default all service requests entered are assigned to the default SLA. We have also mentioned that this SLA should be thought of as a holding location from which service requests are assigned to other SLAs.

You should try to build structure into your SLAs, as it will make future maintenance much easier. In this scenario we are talking about a series of SLAs that will handle hardware-related requests. Above we identified three SLAs (Critical, Urgent and Normal), but to structure properly we would propose that a fourth, distribution-orientated SLA is also created: we will call this the Hardware SLA. This will provide greater flexibility and scalability to adapt for future requirements.



To explain the workflow, an end user enters a service request about a hardware problem.

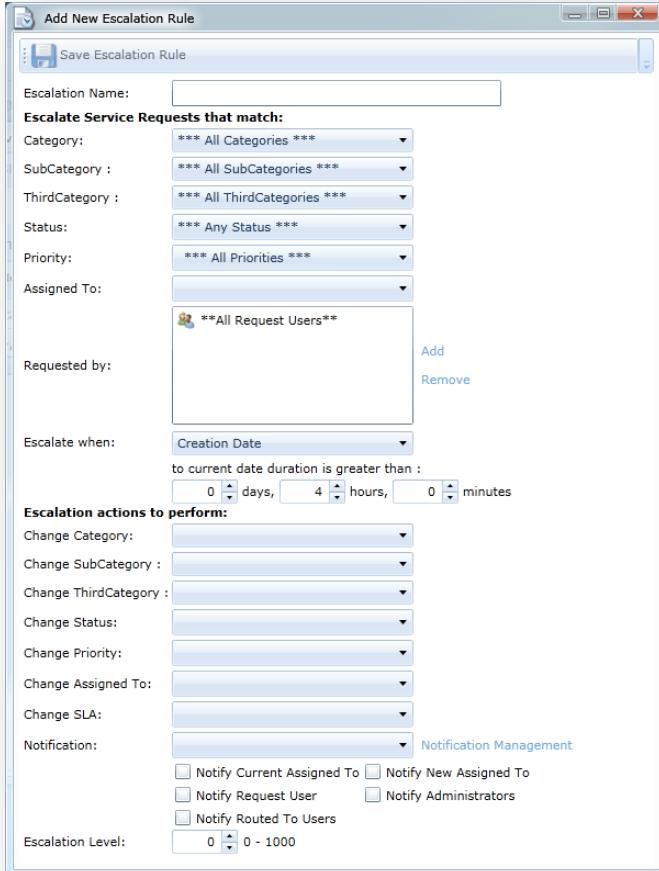
- By default the system will initially assign the SR to the Default SLA.
- The Default SLA processes the newly entered Service Request and determines that it should be passed on to the Hardware SLA.
- The Hardware SLA further processes the Service Request and then determines whether to re-assign it to the Critical, Urgent or Normal SLA.
- There is of course a fourth option to consider, and that is that the Hardware SLA keeps the Service Request to itself because it falls outside the criteria required to pass it to another SLA.

Service Requests are processed by the SLA by way of escalation rules. Every SLA can have multiple escalation rules assigned to it. Escalation rules are always associated with a particular SLA: they are not global in nature.

You can also associate routing rules to SLAs. Earlier in the chapter we touched on the role of Routing Rules and how they are used to route Service Requests. Again, we will look at their roles in relation to SLAs later in this chapter.

Escalation Rules

To understand escalation rules, we need to look at how they are configured and what the options are. The best way to demonstrate this is through a screenshot of a blank escalation rule.



All escalation rules are given a name. It is good practice to include the name of SLA that this rule is associated with, together with a short description of its function.

Below this is the section that allows you to create the filter settings you want to use to capture Service Requests as they come in. Specific values can be selected from the appropriate pull down list boxes.

The middle section allows you to define the trigger point that will activate the rule.

The next section allows you to define the action you want to occur when the escalation rule triggers.

The bottom section allows you to control the notification emails that are sent out.

Finally, at the very bottom is the *escalation level*. This is an important part of the entire escalation system.

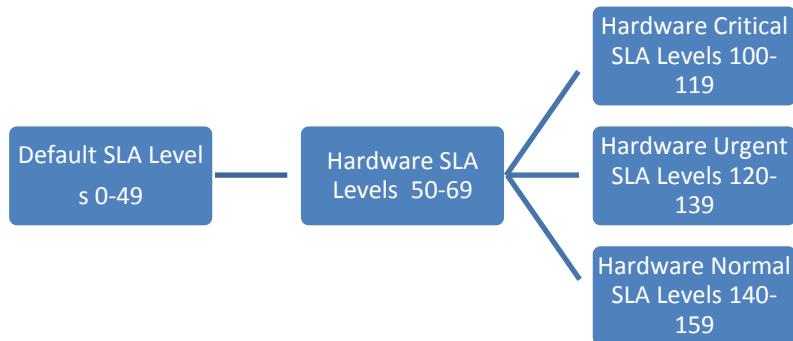
So, what are these escalation levels?

Escalation levels are numerical values between 0 and 1000, which are incremented when an escalation rule triggers. They are applied to all Service Requests entered into the service desk database: every service request has an assigned SLA and an escalation level. The rule is that escalation levels cannot be reset or be changed back to a lower level.

They are used by the escalation rules system to prevent the same rule triggering more than once, which prevents the chance of Service Requests continuously looping around a series of escalation rules.

All Service Requests start life with the escalation level set to zero. Whenever an escalation rule triggers, you should configure the system to increment the escalation level value.

We suggest that you reserve blocks of escalation levels for particular SLAs. For instance, in the example we are working through we will allocate escalation levels 0-49 to the Default SR, 50-69 to the Hardware SLA, 100-119 to the Critical SLA, 120-139 to the Urgent SLA and 140-159 to the Normal SLA.



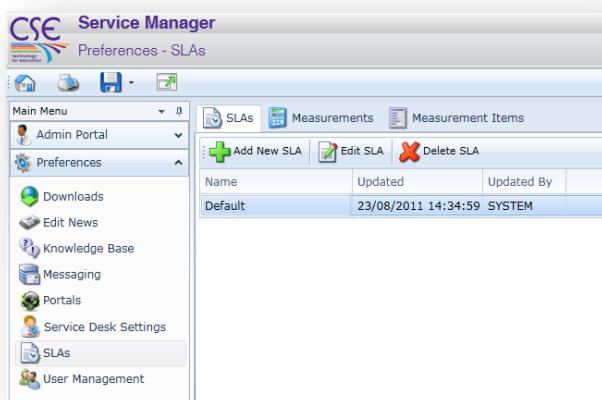
The numbers we have chosen here are purely arbitrary and are designed to illustrate the principle of allocating blocks of escalation numbers to SLAs. If you choose to follow this principle, we would suggest that you allocate blocks of sufficient size to allow for growth.

Creating New SLAs

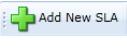
Earlier in this chapter we talked about the Default SLA and that this was fixed and cannot be deleted. We also explained that you should look upon it as a switchboard, which distributes out Service Requests to other SLAs.

We also talked about creating four SLAs:

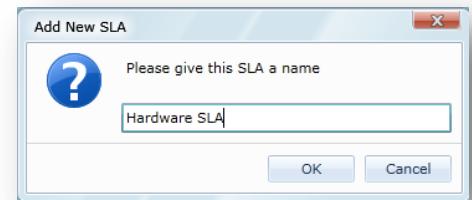
- *Hardware SLA* – which itself acts a distribution hub to reassign hardware related Service Requests to other more specific SLAs.
- *Hardware – CRITICAL SLA*, which handles and mission critical Service Requests that need an immediate response.
- *Hardware – URGENT SLA*, which handles any SR that requires an elevated and urgent response level.
- *Hardware – NORMAL SLA*, which handles the remaining hardware-related Service Requests and which can be scheduled as per normal.



The next step is to create these SLAs and to do this expand the Preferences section of the main menu and click the SLAs option.

Next click  the button.

Now enter the name that you wish to call this SLA. Then repeat the process adding the Hardware – Critical, Urgent and Normal SLAs.



SLAs		
Measurements		
Measurement Items		
	Add New SLA	
	Edit SLA	
Name	Updated	Updated By
Default	23/08/2011 14:34:59	SYSTEM
Hardware SLA	25/08/2011 16:09:50	supervisor
Hardware - CRITICAL SLA	25/08/2011 16:09:59	supervisor
Hardware - URGENT SLA	25/08/2011 16:10:13	supervisor
Hardware - NORMAL SLA	25/08/2011 16:10:27	supervisor

The SLA table will update and display the four new SLAs.

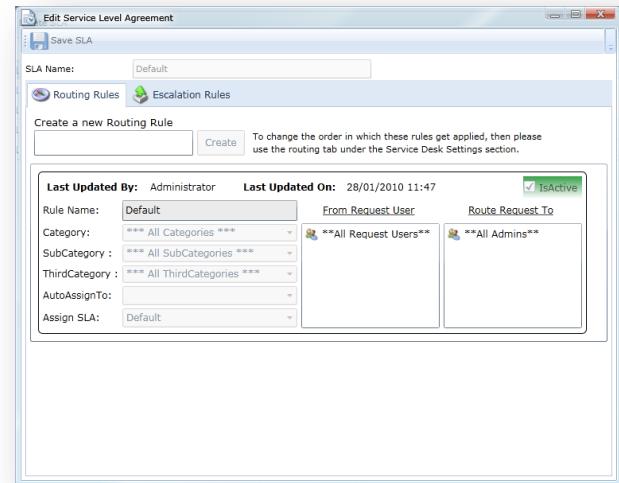
Configuring the Default SLA to route Hardware Service Requests to the new SLAs

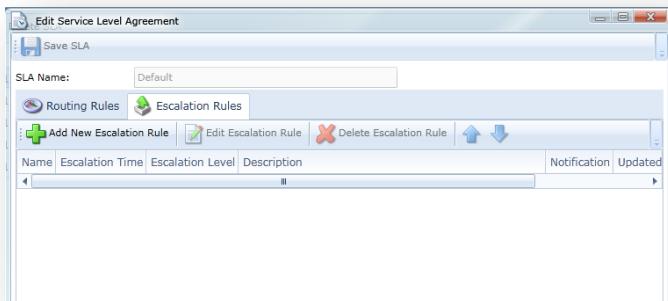
The first step is to configure the Default SLA to route all hardware related Service Requests to the newly created Hardware SLA. Simply double click the Default SLAs table entry, or highlight and click the Edit SLA button.

The SLA details open up on the routing rules page. As this is the default SLA, there is a default routing rule defined. As explained earlier, you can neither change nor delete this default routing rule.

If you examine the details you will see that any Service Request entered by any of your valid service desk users will be routed to all your service desk admin users.

This is a 'catch all' routing rule as it ensures that no matter what happens, Service Requests become visible to all the defined service desk administrators, and this is why you can't alter or delete it.





Next, click the **Escalation Rules** button.

Notice that there are currently no defined escalation rules. The next step is to create our first rule. Click the **Add New Escalation Rule** button.

This opens up the **Add New Escalation Rule** window.

Here we give the rule a descriptive name.

We are filtering any Service Request that is entered with the primary category set to Hardware.

We have left the 'Escalate when' at the default value of Creation Date, but we have changed the trigger time to 5 minutes.

In terms of the action to perform, we are simply changing the SLA that this Service Request is assigned to to Hardware SLA.

We have set the escalation level to a value of 1.

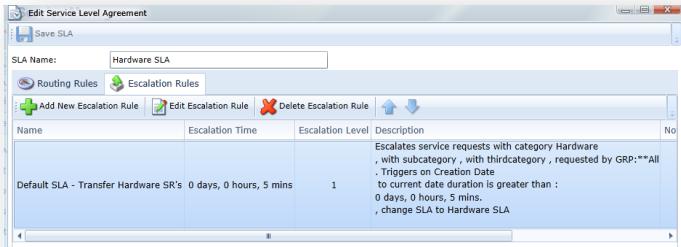
To save, click the **Save Escalation Rule** button at the top of the form.

So what does this do?

- An end user enters a new Service Request with the hardware category set to hardware.
- The Service Manager automatically assigns the newly entered Service Request to the default SLA.
- A background process within Service Manager scans all the Service Requests associated with the Default SLA and checks them against the SLA's escalation rules.
- Any Service Request with a category of Hardware will be re-allocated to the Hardware SLA, approximately five minutes after it has been entered into the system.
- By setting the escalation level to 1, we have indicated that an escalation has triggered and will prevent escalation rules with a lower value triggering an action on the Service Request.

Why wait five minutes before escalating?

The wait time is purely arbitrary, as you can realistically use any positive time value in this field.



The Escalation rule table will then refresh and show a short synopsis of the rule we just entered.

You may notice some additional command buttons in the toolbar. We will be covering their functions in the next section.

Configuring the Hardware SLA to route Critical Hardware Service Requests

We can now move on to creating the Hardware SLA escalation rules. Double click the Hardware SLA entry in the table, then click the Escalation Rules tab, then the **Add** button.

Again give the routing rule a name, for purely ease of maintenance: try to provide a meaningful description.

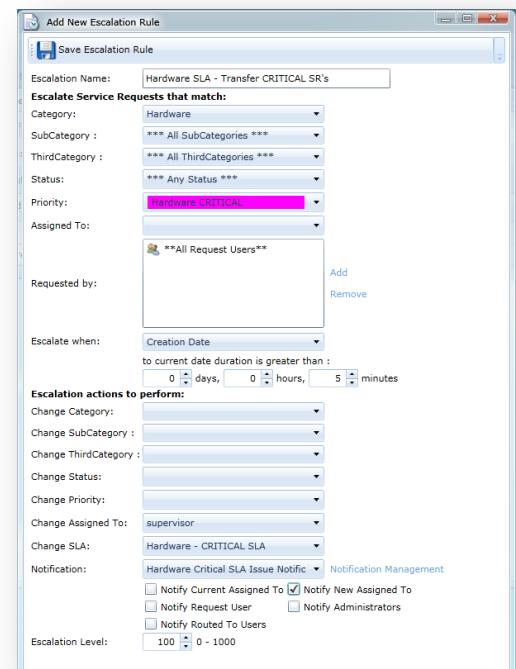
We want to catch any Service Request that has a category of Hardware and has its priority set to Hardware CRITICAL.

The rule will trigger five minutes after the Service Request has been entered into the system.

This time we specifically assign the Service Request to a named user. In this case we have assigned it to the Supervisor.

We have also reassigned the Service Request to the Hardware – Critical SLA.

We have specified that a custom notification is to be emailed to the newly assigned user.



So, what does this do?

- Any Service Request assigned to the Hardware SLA, that matched the filter conditions (category = **Hardware** and priority = **Hardware CRITICAL**) will be escalated five minutes after it has been on the system.
- The Service Request will be assigned to the user called supervisor.
- The Service Request will be transferred to the Hardware – CRITICAL SLA.
- An automated email will be sent to the newly assigned owner of the Service Request.
- All control of this Service Request is now also transferred the Hardware - CRITICAL SLA.

The Next Step

The next step is to create another two Hardware SLA escalation rules. These are almost exactly as above, but the filters are based on:

Category = *Hardware* and Priority = *Hardware CRITICAL*.

The action transfers the Service Request to the *Hardware – Urgent SLA*.

An automated notification is also emailed to the Supervisor user

Set the escalation level to 120

Category = *Hardware* and Priority = *Hardware Normal*.

The action is to transfer the Service Request to the *Hardware – NORMAL SLA*.

An automated notification is also emailed to the Supervisor user

Set the escalation level to 140

Edit Service Level Agreement				
Save SLA				
Hardware SLA				
Routing Rules		Escalation Rules		
			Up	Down
Name	Escalation Time	Escalation Level	Description	Notification
Hardware SLA - Transfer CRITICAL SR's	0 days, 0 hours, 5 mins	100	Escalates service requests with category Hardware , with subcategory *** All SubCategories *** , with thirdcategory *** All ThirdCategories *** , with priority Hardware CRITICAL , requested by GRP:***All Request Users** . Triggers on Creation Date to current date duration is greater than : 0 days, 0 hours, 5 mins. ,change assigned to supervisor , change SLA to Hardware - CRITICAL SLA	Hardware Critical SLA Issue Notification
Hardware SLA - Transfer URGENT SR's	0 days, 0 hours, 5 mins	120	Escalates service requests with category Hardware , with subcategory *** All SubCategories *** , with thirdcategory *** All ThirdCategories *** , with priority Hardware URGENT , requested by GRP:***All Request Users** . Triggers on Creation Date to current date duration is greater than : 0 days, 0 hours, 5 mins. ,change assigned to supervisor , change SLA to Hardware - URGENT SLA	Hardware Normal SLA Issue Notification
Hardware SLA - Transfer NORMAL SR's	0 days, 0 hours, 5 mins	140	Escalates service requests with category Hardware , with subcategory *** All SubCategories *** , with thirdcategory *** All ThirdCategories *** , with priority Hardware - Normal , requested by GRP:***All Request Users** . Triggers on Creation Date to current date duration is greater than : 0 days, 0 hours, 5 mins. ,change assigned to supervisor , change SLA to Hardware - NORMAL SLA	Hardware Normal SLA Issue Notification

Let's recap on what has been done so far

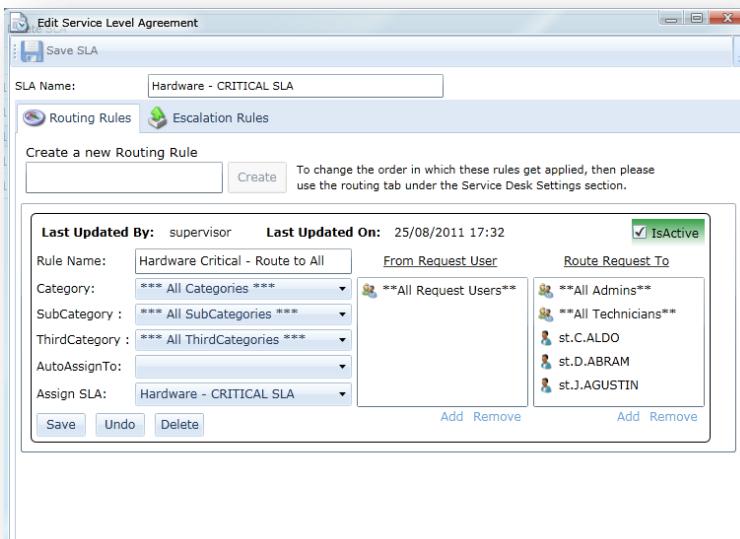
- We have created four new SLAs
- We have created a Default SLA escalation rule that transfers all Service Requests that are entered into the system, filtering all Hardware Service Requests to the Hardware SLA.
- We went on to create three escalation rules under the Hardware SLA that then transfer Service Requests on to the corresponding CRITICAL, URGENT or NORMAL Hardware SLAs
- Escalation levels have been set to the appropriate SLA range
- Each escalation rule also triggered an email notifying the Supervisor that a call had been logged.

Final Steps

Now we have re-allocated hardware-related Service Requests to the most appropriate SLA, we can now implement the specific escalation processes for each of the various priority categories. Rather than illustrate all three examples, we will concentrate on Service Requests that have been transferred to the Hardware – CRITICAL SLA.

By definition, any Service Request that falls within the remit of the Hardware – Critical SLA is something that requires immediate attention as it is likely to cause major disruption to the ICT system as a whole. The time to respond targets are therefore regarded as top priority ‘drop everything else and look at this’ issues.

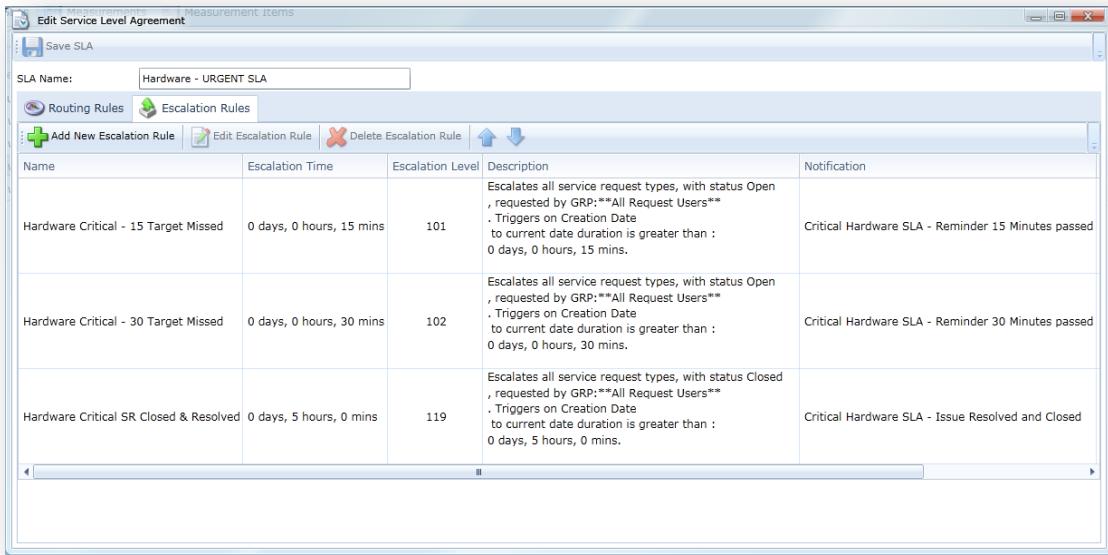
So the first thing is to look at is who these Service Requests are routed to. Remember, routing an Service Request does not imply responsibility to resolve the issue. That is the remit of the person to whom the Service Request has been assigned. Routing simply means that those users specified have visibility of the Service Request with the service desk. Since critical issues are so important, we want all the ICT support team to be aware, we would also like to make some members of the SMT aware. The easiest way to do this is to specify a routing rule that includes all service desk administrators, technicians and specific SMT members.



Note that the routing rule is ticked as being active. Any Service Requests that are assigned to the SLA are instructed to be routed to All Admins, All Technicians and specifically to three individual users (SMT members).

Note also that we have not specified any specific filter in terms of categories. There really is no need at this point, because the way in which Service Requests have been transferred to this SLA means that they have already been filtered.

Now that all relevant Service Requests are now assigned to this SLA, we can consider the escalation rules that we want to apply. This is also the point at which we can look at the implications of the escalation level number and at some other functions available.



Here we can see that we have created three escalation rules under the Hardware – URGENT SLA.

Hardware – Critical 15 Target Missed

The service level expected for critical hardware Service Requests states that the request must begin to be investigated within 15 minutes of the call being raised. So the first escalation level looks at the call's status. If it is OPEN, then it means that none of the ICT support responders (Administrators or Technicians) have flagged that they are working on the issue.

Service desk convention requires the status field of any Service Request is changed to *In Progress* when work starts to on resolving the issue. The Service Request status field could also be flagged as *On Hold* if for instance they are waiting for a field engineer to turn up, or *Closed* if the issue has been resolved.

When triggered, this escalation rule also fires off an email notification informing the recipients that an SLA target has been missed.

Also, notice that the Escalation level has been set to level 101, which is the next level up the escalation hierarchy for this SLA.

Hardware – Critical 30 Target Missed

It is now 30 minutes after the Hardware Critical Service Request was raised, and the status field is still set to *Open*. This escalation rule now fires off an email not only to all the ICT support responders, but also to the SMT. This is seen as a major escalation step as it is intended to get the SMT involved in the issue.

Also notice that the escalation level has now moved up to level 102.

Hardware – CRITICAL Service Request CLOSED & RESOLVED

This escalation rule simply tracks when the Service Requests status changes to *Closed*. When it does this, an email is automatically sent to interested parties to tell them that the issue has been resolved and the Service Request is now closed.

Notice that the escalation level has now been set to level 119. Notice that we have set the escalation level to the top value we assigned to this SLA. By doing this we have provided space to insert additional escalation rules later on.

Watching what happens to an Service Request as it is escalated

Request ID: 424
 Request User: supervisor [loading...]
 Subject: Curric users data server offline
 Cat | Sub | Third: Hardware | Server | [None] Change
 Created Date: 30/08/2011 13:33:36 - 20 minutes ago
 Last Updated: 30/08/2011 13:49:04 - 4 minutes ago
 Escalation Level: 101
 SLA: Hardware - CRITICAL SLA
 Status: Open
 Priority: Hardware CRITICAL
 Assigned To: [dropdown]
 Attachments: [dropdown]
 Message: The curruc users data server has gone off line. Users unable to access their assets.
 Assets: [dropdown]

One of the impressive features of the CSE Service Desk system is the way it keeps a complete history of all Service Request interactions, including automated processes such as triggering escalation rules.

The first indication is to look at the Service Request itself: here you can see the currently SLA applied, and the current escalation level.

Here we can see that the Service Request has been on the system for 20 minutes, that it belongs to the Hardware – Critical SLA, and has an escalation level of 101.

An even more detailed history relating to this Service Request can be found by clicking the **Service Requests History** tab.

Here we can see the various escalation rules triggering.

It is worth noting that every transaction, be it manual or automatic, is traceable using the Service Requests history.

You can also double click any entry, and it will render a report that details the status of the Service Request at that point in time.

TimeStamp	Version	Status	Assigned To	Priority	Reason
30/08/2011 13:33:36	1	Open	supervisor	Hardware CRITICAL	New Service Request Created
30/08/2011 13:39:04	2	Open	supervisor	Hardware CRITICAL	Service Level Agreement :: Default SLA - Transfer Hardware SR's was matched
30/08/2011 13:39:04	3	Open	supervisor	Hardware CRITICAL	Service Level Agreement :: Hardware SLA - Transfer CRITICAL SR's was matched
30/08/2011 13:49:04	4	Open	supervisor	Hardware CRITICAL	Service Level Agreement :: Hardware Critical 15 Target Missed was matched

Recapping

- We have looked at how SLAs can automate, route, and escalate Service Requests.
- We have looked at how the Default SLA can be modified to distribute Service Requests to other SLA stacks.
- We looked at using escalation levels, and how you can create an escalation level hierarchy.
- We have looked at how the Service Requests keep an individual record of all transactions in their history
- We explored how you can go about planning the implementation of SLAs.

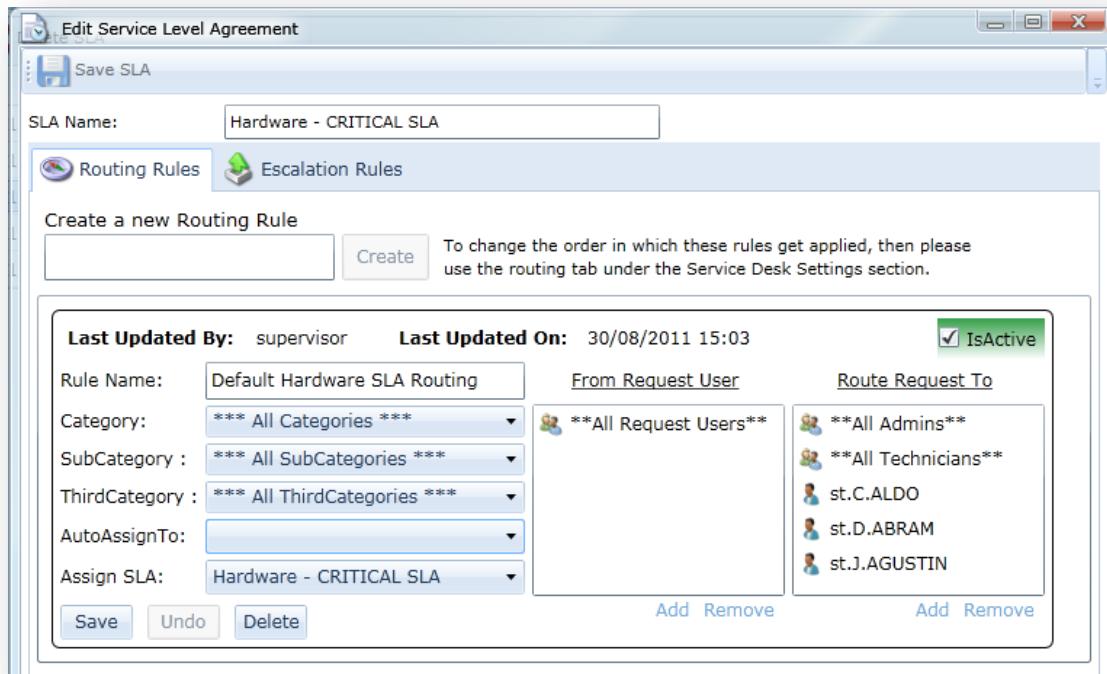
SLA Routing Rules

When a Service Request is entered into the system, only the person who entered the request and the service desk administrators will initially be able to see it within the database. This is defined by the Default SLA's fixed routing rule.

A routing rule enables you to automatically route the request to different people. As already discussed, routing a Service Request does not by default assign responsibility to resolve the issue. This is usually the responsibility of the person who is assigned the request, but anybody who has had a service request routed to them will be able to view and interact with the request.

You can also use routing rules to assign Service Requests to an individual support person (**Auto Assign To** field). However it is probably fair to say that this is not something that is entirely appropriate for a routing rule to do as there are now better places to perform this function. This function remains to provide backwards compatibility with earlier versions of Service Manager.

In addition, there are some additional filtering options available, enabling you fine-tune the rule in order to more fully meet your own specific requirements.



The level of filtering available includes Category/Sub Category/Third Category and the requesting user.

The Assign SLA field will normally displays the name of the SLA that owns this routing rule. If you want to re-assign the rule to another SLA, simply expand the list box and select the SLA you want to move the rule to.

The **Route Request To**, **Auto Assign To** and **Assign SLA** fields are action fields, in that they are the actions the rule performs.

SLAs by convention do not need routing rules to be specified. Within the SLA structure, the last applied routing rule from any of the SLAs that a Service Request has been processed by will be remembered and will remain active. This means that you could simply use routing rules that are attached to the default SLA, as all Service Requests are processed by the Default SLA.

Creating a new Routing Rule

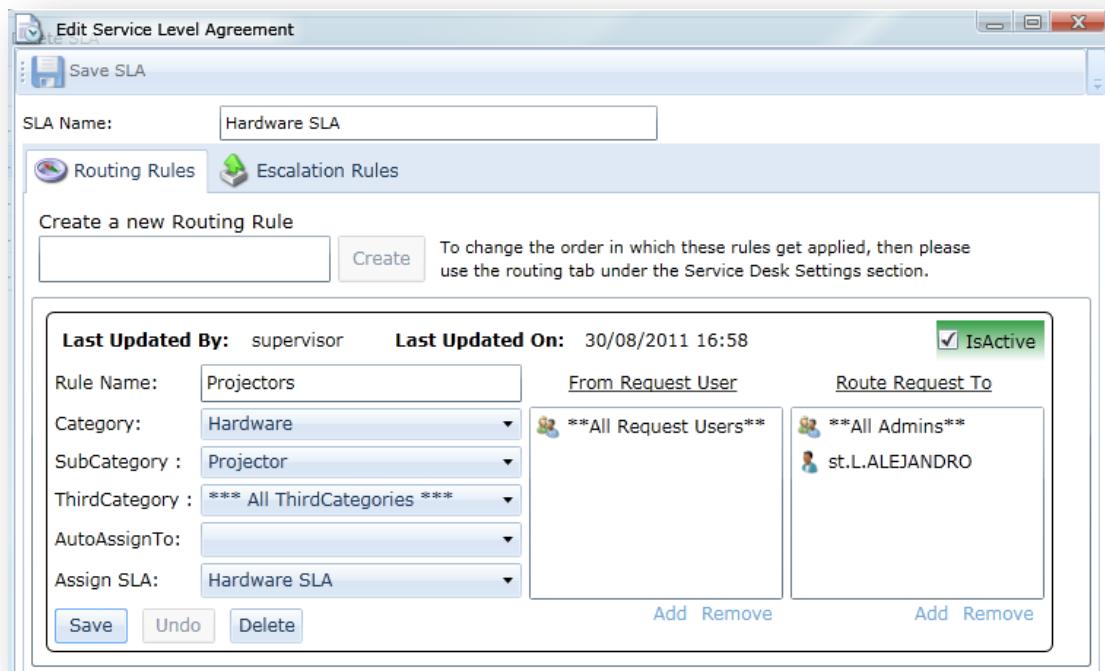
Select the SLA that you want the rule to apply to and double click it, or highlight and click the **Edit SLA** button.

Give the routing rule a name and then click the **Create** button.

Set the filter conditions using the pull down list boxes to make your selections. If you wish to filter based on the requesting user, click the **Add** link and then select the user or users from the list that will appear.

Then select the Service Manager management users who you wish to specifically route these service requests to. Click the **Add** link and make your selections from the list that appears. If you wish to remove any selection, highlight and click the **Remove** link.

To activate the routing rule, tick the **Is Active** box. If you leave this un-ticked, the rule will not be active and will remain dormant.



Clicking on the **Save** button commits the routing rule in the database. If you no longer require the rule, click the **Delete** button to remove it.

Routing Rules Hierarchy

You can create many routing rules and they will appear in a list. Having more than one routing rule assigned to an SLA brings into play the order in which they will be applied. By convention, rules at the top of the list take precedent over rules lower down in the list.

You can change the order of the rules, but to do so you must use the routing rules control that is found under [Preferences/Service Desk Settings/Routing](#). Here you will see a global list of all routing rules and you will be able to alter the hierarchy by moving individual rules up and down the global list.

Rule Name	Category	SubCategory	ThirdCategory	AutoAssignTo	Assign SLA	From Request User	Route Request To	IsActive
Projectors	Hardware	Projector	*** All ThirdCategories ***		Hardware SLA	**All Request Users**	**All Admins** st.L.ALEJANDRO	<input checked="" type="checkbox"/>
Projector - Blown Bulb	Hardware	Projector	Bulb Blown		Hardware SLA	**All Request Users**	**All Admins** st.C.ALDO	<input checked="" type="checkbox"/>
Default Hardware SLA Routing	*** All Categories ***					**All Request Users**	**All Admins**	<input checked="" type="checkbox"/>

In the example listed above, we have two routing rules defined that filter on [Hardware/Projector](#) category fields. Within the list, the Projectors rule appears before the Projector – Blown Bulb rule. Therefore by convention the rule at the top of the list will take precedent over rules that are below it.

Logically, this means that Service Requests entered which have their categories set to [Hardware/Projectors/Blown Bulb](#) will always trigger the Projectors routing rule. The rule we have created to route Blown Bulb service requests to ST.C.ALDO will never be triggered.

The solution is to move the Projector – Blown Bulb routing rule so that appears higher in the hierarchy. Simply use the up/down arrows to change the position of the rule in the list.

Managing SLAs

Besides creating new SLAs as described so far, you can also maintain your SLAs by adding new SLAs to the system, edit your existing SLAs, change the hierarchy and order in which the SLAs are processed, and even delete them.



It is probably a good point to mention the law of unintended consequences and how it applies to working with SLAs. You need to be careful when making changes to established SLA structures, as even the most innocent change can cause unwanted effects.

For instance, editing an existing SLA and simply changing its escalation level can cause it to re-trigger hundreds of existing service requests, possibly causing it to automatically update the service requests and fire off hundreds of email alerts to bemused service desk users.

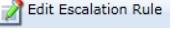
SLA Escalation Rule Hierarchy

The order in which SLAs Escalation Rules are processed is controlled by the location of the rule in the list. Rules in the list are processed by the system from the top down. It is therefore possible for the escalation rules to be processed out of your intended order. This normally occurs after you add a new escalation rule, as new rules are always inserted at the bottom of the list.

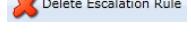
You can arrange the order in which the Escalation Rules appear in the list by moving their location in the list by using the buttons located in the toolbar. Highlight the rule that you want to move and then click the appropriate button to move it up or down the list.

Edit Service Level Agreement			
<input type="button" value="Save SLA"/> <input type="button" value="Cancel"/>			
SLA Name: <input type="text" value="Hardware - NORMAL SLA"/>			
<input type="button" value="Routing Rules"/> <input type="button" value="Escalation Rules"/>			
<input type="button" value="Add New Escalation Rule"/> <input type="button" value="Edit Escalation Rule"/> <input type="button" value="Delete Escalation Rule"/> <input type="button" value="Up"/> <input type="button" value="Down"/>			
Name	Escalation Time	Escalation Level	Description
HW Normal SLA - All Projector queries to AV Tech	0 days, 0 hours, 5 mins	141	Escalates service requests with category Hardware , with subcategory Projector , with thirdcategory , requested by GRP:**All Request U . Triggers on Creation Date to current date duration is greater than : 0 days, 0 hours, 5 mins. ,change assigned to st.L.ALEJANDRO
HW Normal SLA - Projector Bulb Blown to AV Tech	0 days, 4 hours, 0 mins	142	Escalates service requests with category Hardware , with subcategory Projector , with thirdcategory Bulb Blown , requested by GRP:**All Request Users** . Triggers on Creation Date to current date duration is greater than : 0 days, 4 hours, 0 mins. ,change assigned to st.CALDO
HW Normal SLA - 24 Hour Target Missed Triggered	0 days, 1 hours, 0 mins	150	Escalates service requests with category Hardware , with subcategory *** All SubCategories *** , with thirdcategory *** All ThirdCategories *** , with status Open , requested by GRP:**All Request Users** . Triggers on Time to Respond duration is greater than : 0 days, 1 hours, 0 mins. ,change priority to Urgent
HW Normal SLA - IWB issues to AV Techs	0 days, 0 hours, 5 mins	143	Escalates service requests with category IWB Issues , with subcategory , with thirdcategory , requested by GRP:**All Request Users** . Triggers on Creation Date to current date duration is greater than : 0 days, 0 hours, 5 mins. ,change assigned to st.CALDO

SLA Escalation Rule – Editing

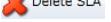
You can edit any of your SLAs Escalation Rules by either double clicking the rule, or by highlighting and clicking the  button in the tool bar.

SLA Escalation Rule – Deleting

You can delete an SLA Escalation Rule by selecting the rule from the list and then clicking the  button in the toolbar.

Remember, that deleting an escalation rule from an SLA will not affect any Service Requests that have triggered by the rule. Any actions that this rule performed on the Service Request will remain associated with the particular Service Request.

Deleting an SLA

SLAs can be deleted by highlighting the SLA in its table and then clicking the  button.



Remember that Service Requests are linked and owned by the SLAs on your system. By deleting an SLA in its entirety you are removing the link that those Service Requests have to the SLA.

The Service Requests effectively become orphaned. By convention all Service Requests on the system must have an associated SLA. The system will therefore transfer any orphaned Service Requests it finds back to the Default SLAs control.

Because this can potentially affect the status of many Service Requests in the database, the system will request confirmation before allowing you to delete an entire SLA from the system.

When you delete an entire SLA, you also delete any routing rules and escalation rules that it contained.



Please note, that while orphaned Service Requests are handed back to the Default SLA, whatever escalation level that these requests had will remain the same. Escalation levels are never reset and can never be reduced in value.

SLA Measurement and Measurement Items

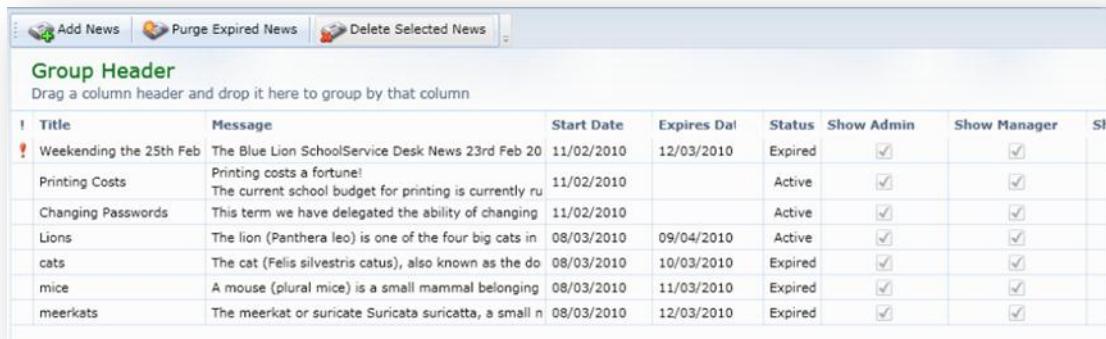
The new version of Service Manager has added some tools to help measure the performance of the support team in meeting response targets specified by the various SLA that have been set.

Measurement Items allow you to specify and name KPIs that you wish to measure performance on. Measurements on the other hand allow you to create a scoring system that automatically awards marks depending on how well you performed against these targets.

Whilst both measurement constructs are associated with individual SLAs, it really is more appropriate to discuss them in the Reporting section of the manual.

Preferences/Edit News

News is designed to provide quick and efficient way of informing and updating your Service Manager users about issues that relate to the school's ICT system. However, the rather innovative method of delivery via the Service Manager various web portals makes the news system versatile and adaptable to many other uses.



Group Header								
Drag a column header and drop it here to group by that column								
!	Title	Message	Start Date	Expires Date	Status	Show Admin	Show Manager	Show User
!	Weekending the 25th Feb	The Blue Lion SchoolService Desk News 23rd Feb 20	11/02/2010	12/03/2010	Expired	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Printing Costs	Printing costs a fortune!	11/02/2010		Active	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Changing Passwords	This term we have delegated the ability of changing	11/02/2010		Active	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Lions	The lion (<i>Panthera leo</i>) is one of the four big cats in	08/03/2010	09/04/2010	Active	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	cats	The cat (<i>Felis silvestris catus</i>), also known as the domestic cat	08/03/2010	10/03/2010	Expired	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	mice	A mouse (plural mice) is a small mammal belonging	08/03/2010	11/03/2010	Expired	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	meerkats	The meerkat or suricate (<i>Suricata suricatta</i>), a small n	08/03/2010	12/03/2010	Expired	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

When you click the *Edit News* menu item, a familiar table view will be displayed. The table formatting commands remain the same as described earlier in the manual.

Each news article is displayed as a separate entry within the table.

At the top of the form is the toolbar that contains various controls.

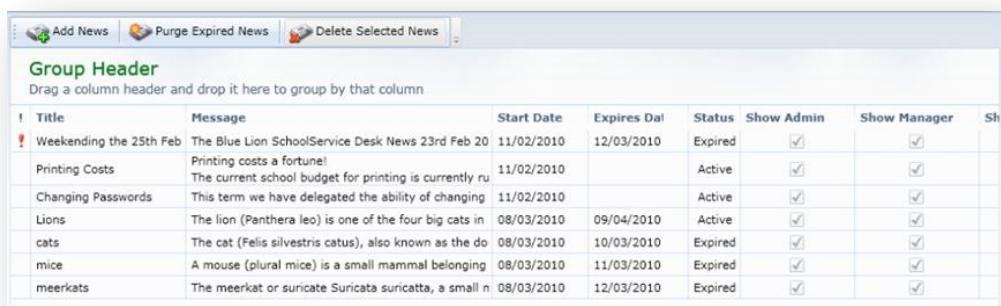
Add News - click this to start adding a new news item.

Purge Expired News - when you create a news article you can specify both a start and end date. Clicking this button will remove all 'expired' news articles from the database.

Delete Selected News - first click a news article in the table and then this button to remove a specific entry.

Adding a News Article

Clicking the **Add News** button in the toolbar opens the News Editor.



Group Header								
Drag a column header and drop it here to group by that column								
!	Title	Message	Start Date	Expires Date	Status	Show Admin	Show Manager	Show User
!	Weekending the 25th Feb	The Blue Lion SchoolService Desk News 23rd Feb 20	11/02/2010	12/03/2010	Expired	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Printing Costs	Printing costs a fortune!	11/02/2010		Active	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Changing Passwords	This term we have delegated the ability of changing	11/02/2010		Active	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	Lions	The lion (<i>Panthera leo</i>) is one of the four big cats in	08/03/2010	09/04/2010	Active	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	cats	The cat (<i>Felis silvestris catus</i>), also known as the domestic cat	08/03/2010	10/03/2010	Expired	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	mice	A mouse (plural mice) is a small mammal belonging	08/03/2010	11/03/2010	Expired	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
	meerkats	The meerkat or suricate (<i>Suricata suricatta</i>), a small n	08/03/2010	12/03/2010	Expired	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

The news editor is a general-purpose rich text and graphic system with basic formatting control.

The *Title Text* box is where you input the title message that is specific to this article.

The *Start Date* is where you can specify the date that the news article becomes active and therefore visible in the news menu, enabling you to create articles ahead of time. Below, you can specify that the article expires and specify the date.

You can then select which category of user (Administrator, Technician, or End User) who will see the publisher article.

Flagging the article as **Urgent** marks the article and adds a visible marker to the news page that is designed to draw the end users attention to that page.

The main portion of the Add News Item frame is the text entry box and above that the various editing and formatting controls.

Toolbar Controls



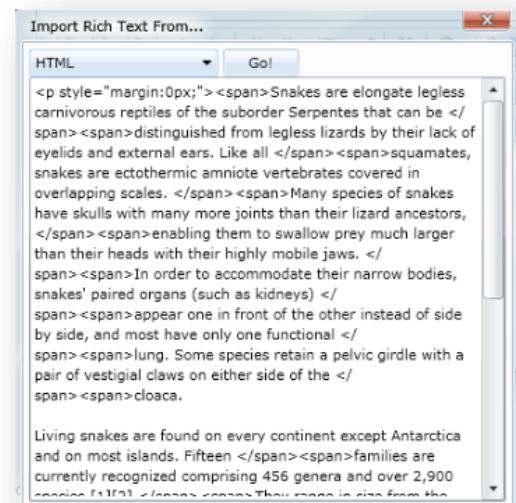
Import

This control allows you to import HTML, XML and Plain Text directly into the editor.

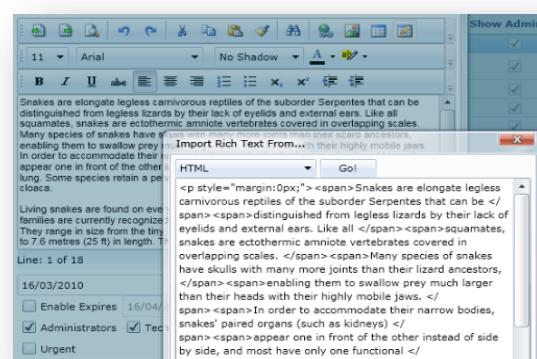
A restriction of Silverlight™ is that you cannot use right click controls to cut and paste data into fields. This restriction may be resolved in later releases of Silverlight™, but for the moment the only method of pasting is to use the *Shift Insert* key press.

First select the data that you want to import into the news editor. In the example to the right we have selected HTML code.

From the list box at the top, select the code type from the list that appears (HTML, XML or Plain Text).



Click the **Go!** Button to import the data into the main news editor.



The HTML code (in this case) is converted into Rich Text Format and displayed within the main body of the News editor. When you have successfully imported your data into the editor, close the import frame.

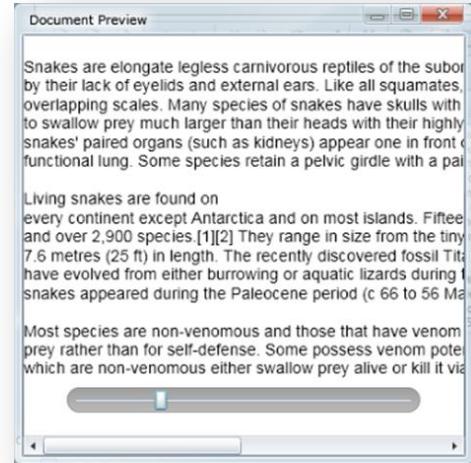


Export

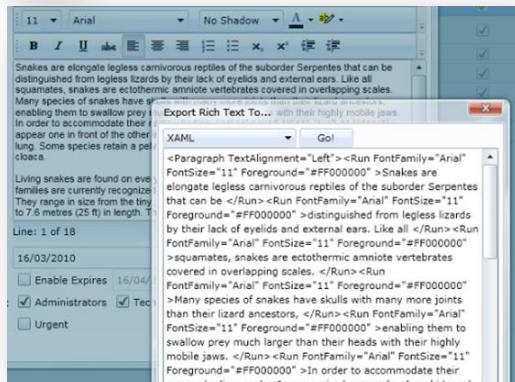
This control allows you to export the contents of the News editor into HTML, XML, XAML or Plain Text. Simply select the option required from the top list box and then click the Go! button.

You can then select the data contained within the export frame, and press Ctrl C to copy it. You can then paste the data into a suitable Windows Application.

When complete, close the Export frame.



Preview



This control allows you to preview your news article.

The slider control at the bottom of the preview screen allows you to zoom in and out.



Undo and Redo

This pair of controls allows you to undo and redo the last editing operation.



Cut, Copy and Paste

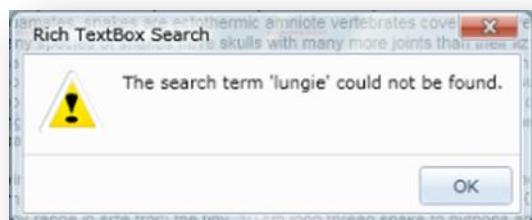
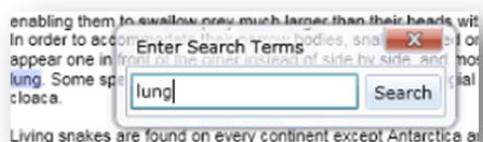
These controls allow you to select objects within the editor and cut, copy, or paste.

If you wish to paste text from an external source, such as a word document, you have to use the shift insert keys. This works only for text - you cannot paste images using this method.



Search

This control allows you to search for words contained within the news article. Simply enter the text that you want to find into the text box and click the **Search** button. The first match found will then be highlighted with the news editor.



If the term you are searching for does not exist, a warning box will appear, close by clicking the **OK** button.



Insert URL Link

This control allows you to insert a URL link into the body of the news article. First, mark the text that you want to apply the URL to. Then click the **Insert URL** button and then enter the full URL into the list box provided, then click the **Insert** button.



To follow links within news articles you need to click the link whilst holding down the Ctrl key. This opens a new browser window.



Insert Picture

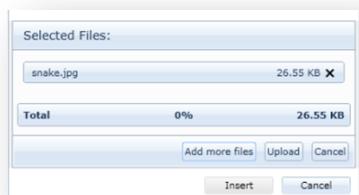
This control allows you to insert a picture/graphic into the news article.

Position the cursor to where you want to insert the image and click the **Insert Picture** button.

The image system works as a library: images are uploaded into the database and can then be re-used in different news articles.

To upload a new image click the **Browse** button and select the image files that you want to upload.





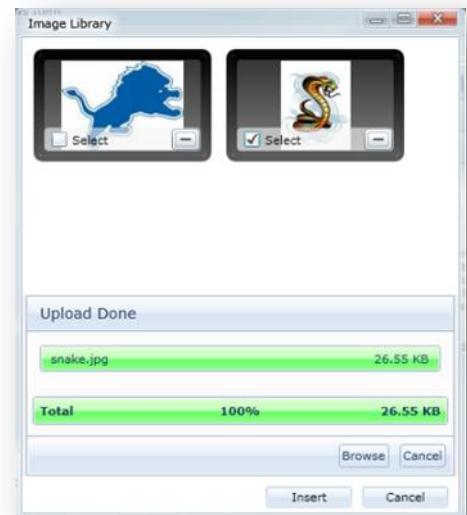
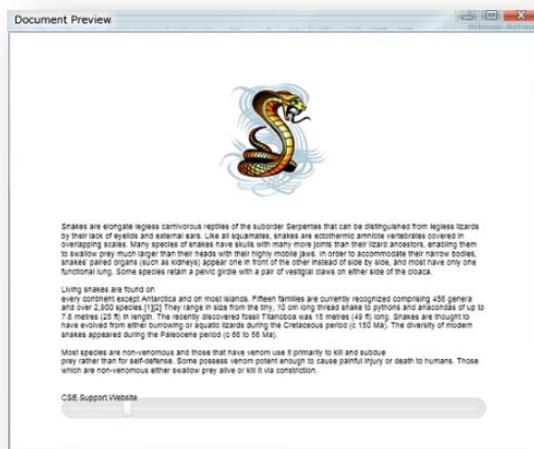
You can upload and use most graphic file types, typically JPEG, GIF and PNG. You can upload multiple image files if you so wish: simply keep adding files as needed.

When you have the images you want, click the **Upload** button.

Once the images have uploaded, you will see the thumbnail, select the image you wish to insert by ticking the **Select** box.

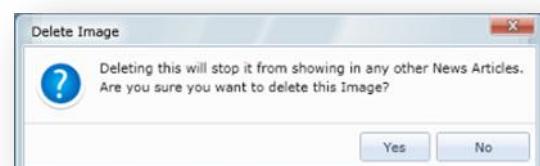
You can insert more than one image at a time. Simply click the select box against each image you want.

Then click the **Insert** button to complete the process.



The image is then inserted into the body of the news article, here we are viewing the complete article, including the newly added image using the preview facility.

You can delete and remove images from the library by clicking the small - (minus) icon that against the image. This pops up a warning message, click the **OK** button to remove the image from the library.

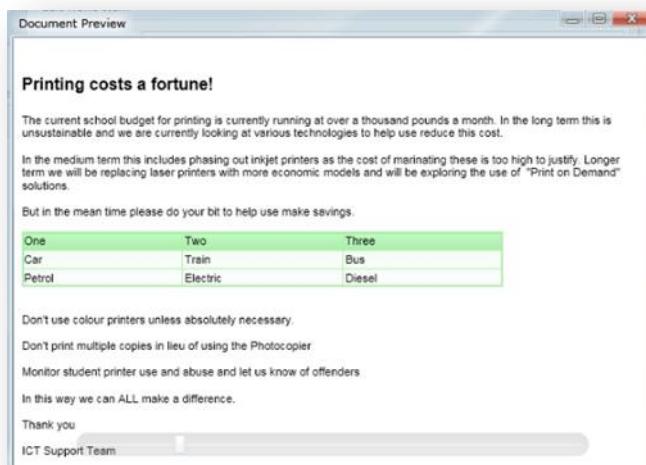
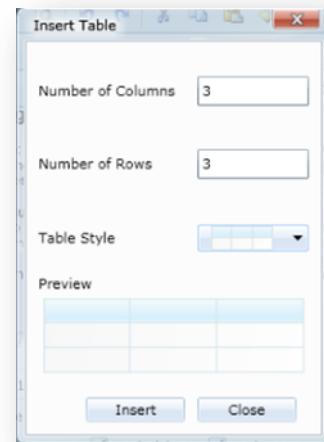




Insert Table

This control allows you to insert a table into your news article.

Select the number of rows and columns you wish to insert and select the *Table Style* from the options contained within the list box.



Text can then be entered into the individual table cells. Below is a preview of a table that has been inserted into a news article.



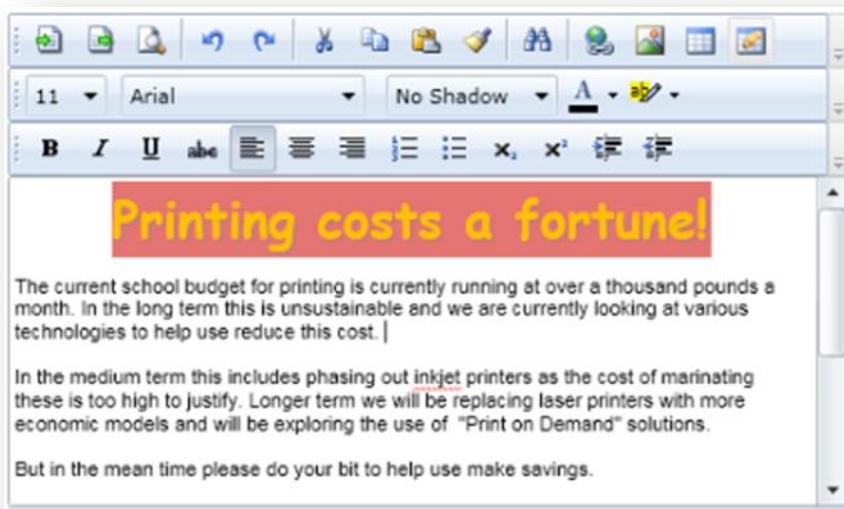
Delete Table

Simply highlight the table you want to remove from the news article and click the button. Please note that this also removes all content of the table as well.

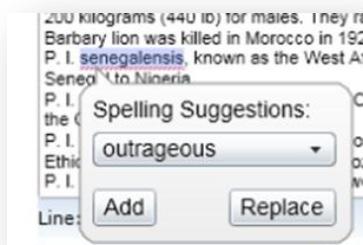
Text Formatting Controls

The middle and bottom toolbars houses the text formatting controls.

The remaining format controls should be familiar and include general-purpose text and paragraph formatting functions. The aim is to provide a simple set of editing and formatting options to help you produce eye-catching news articles.



Spelling Checker



The text entry system supports a rudimentary spelling checker. Any incorrect words are underlined in red. Hover the mouse over the misspelt word and a box appears with a list of suggested alternatives. If the word is actually spelt correctly, you also have the option of adding it to the dictionary.

Editing an Existing News Article

Select the news article you want to edit and double click it. This opens the article within the text editor described above. Make any changes you want and then click the **Save** button.

Purging Expired News

Any news article published can have an expiry date configured. In normal use once this date has passed, the news article will stop being displayed within the portals news menus. You can either manually delete the article, or you have the option of purging the system of all expired news.

Please note that both of these operations remove the news article completely from the system, there is no backup.

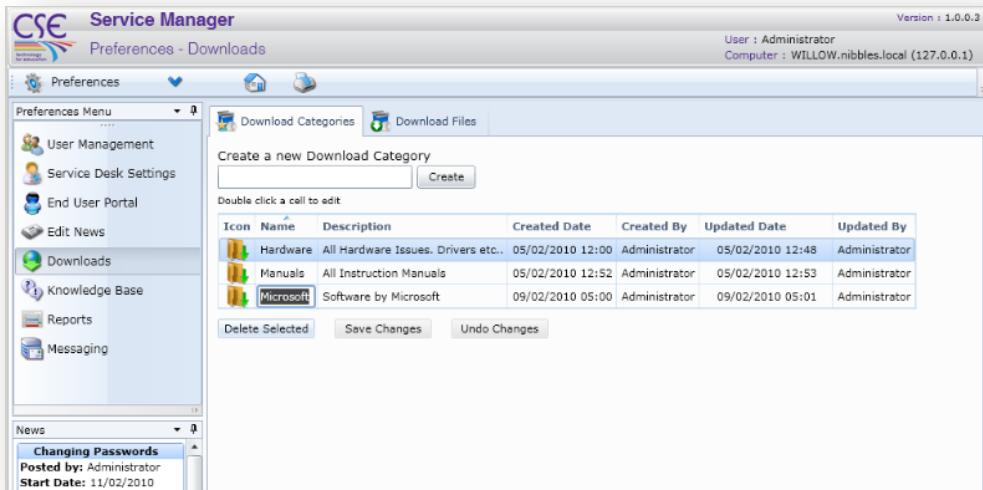
If the news article might need to be published again, your best plan is probably to leave the article in its 'expired' state. When you need to reactivate it, edit it and change the start and expiry date fields as appropriate.

Preferences/Download

The download section allows a library of useful files to be stored within Service Manager and for them to be made available to end users and technicians as appropriate.

Keeping a library of useful drivers and software utilities on hand for all technicians will save time and effort. Online manuals and instruction sheets can be archived here and made available to your end users to access directly and for downloading.

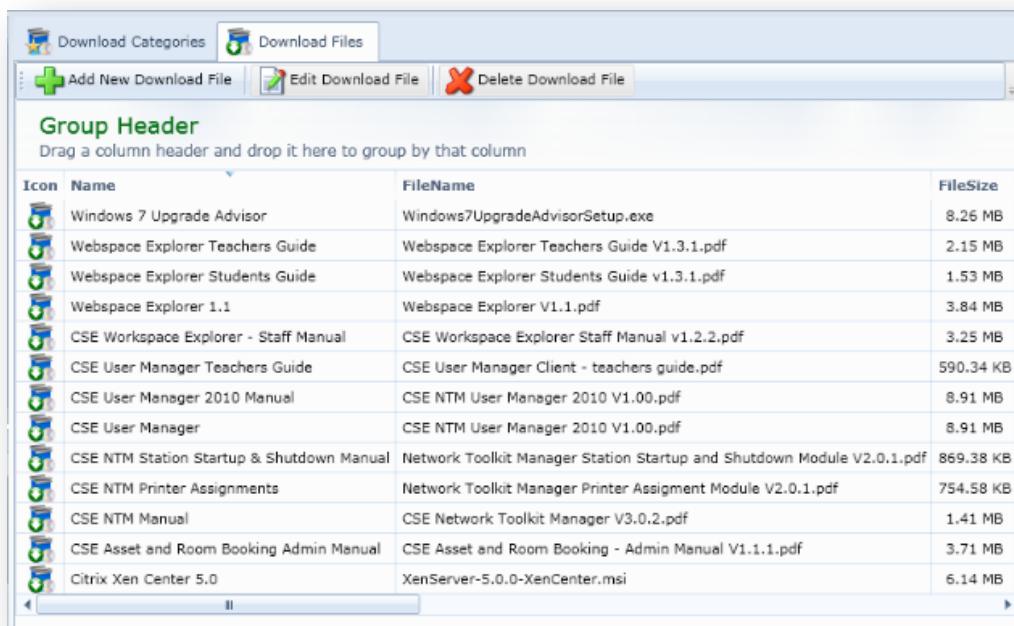
You could also use the download section to store on-line training videos that end users can access.



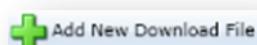
In the screenshot above you can see that downloads are separated into user definable categories. You can specify your own categories by simply typing in a new name in the text box provided, then clicking the **Save Changes** button.

Clicking on the Downloaded Files tab at the top of the screen form opens the interface that allows you to upload files into the Service Manager system.

In the top toolbar you will find the download controls. Below is the list of files that have already been uploaded.



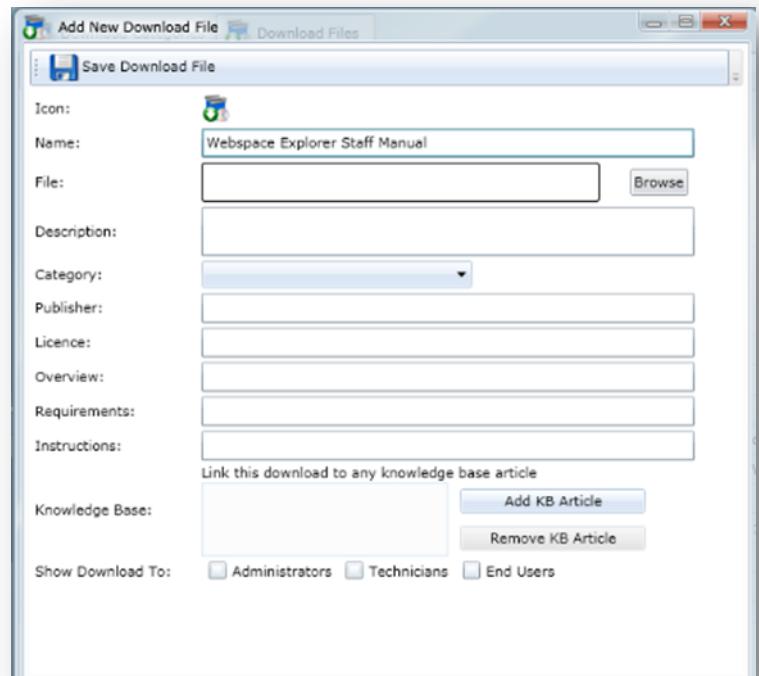
Icon	Name	FileName	FileSize
	Windows 7 Upgrade Advisor	Windows7UpgradeAdvisorSetup.exe	8.26 MB
	Webspace Explorer Teachers Guide	Webspace Explorer Teachers Guide V1.3.1.pdf	2.15 MB
	Webspace Explorer Students Guide	Webspace Explorer Students Guide v1.3.1.pdf	1.53 MB
	Webspace Explorer 1.1	Webspace Explorer V1.1.pdf	3.84 MB
	CSE Workspace Explorer - Staff Manual	CSE Workspace Explorer Staff Manual v1.2.2.pdf	3.25 MB
	CSE User Manager Teachers Guide	CSE User Manager Client - teachers guide.pdf	590.34 KB
	CSE User Manager 2010 Manual	CSE NTM User Manager 2010 V1.00.pdf	8.91 MB
	CSE User Manager	CSE NTM User Manager 2010 V1.00.pdf	8.91 MB
	CSE NTM Station Startup & Shutdown Manual	Network Toolkit Manager Station Startup and Shutdown Module V2.0.1.pdf	869.38 KB
	CSE NTM Printer Assignments	Network Toolkit Manager Printer Assignment Module V2.0.1.pdf	754.58 KB
	CSE NTM Manual	CSE Network Toolkit Manager V3.0.2.pdf	1.41 MB
	CSE Asset and Room Booking Admin Manual	CSE Asset and Room Booking - Admin Manual V1.1.1.pdf	3.71 MB
	Citrix Xen Center 5.0	XenServer-5.0.0-XenCenter.msi	6.14 MB



Allows you add new files into the download section.

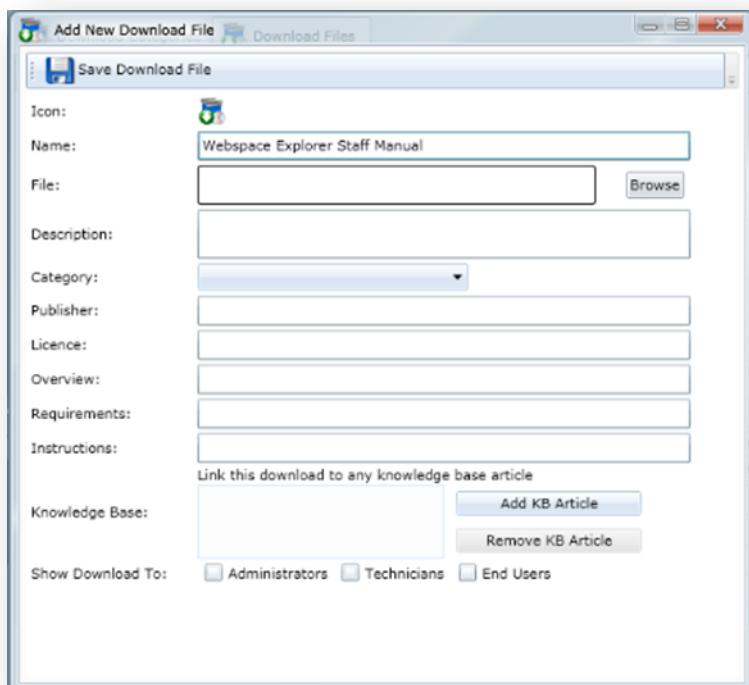
The form that appears allows you to document and specify the various parameters required by this download.

The name is the field that describes the content of the download file. It is the main display name used by the download system and is also used by the inbuilt search function to aid users find downloads files quickly.



The dialog box is titled 'Add New Download File' and contains the following fields:

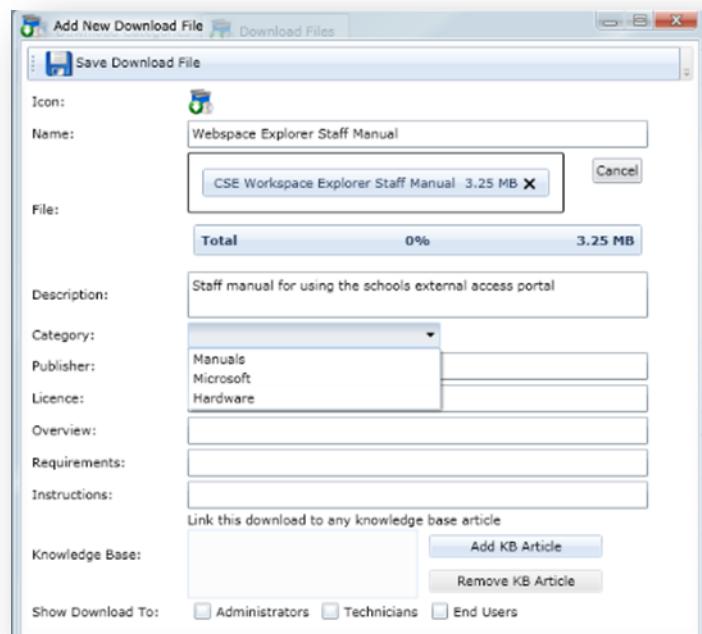
- Icon:
- Name:
- File:
- Description:
- Category:
- Publisher:
- Licence:
- Overview:
- Requirements:
- Instructions:
- Knowledge Base:
- Show Download To: Administrators Technicians End Users



Alongside the File text box is a **Browse** button. Clicking this opens a file selection window that allows you to search for and select the file you want to upload into the system.

Description allows you to enter a plain text description of what the file contains and how it should be used.

The Category list box, when expanded will display the available download categories. By using this feature you can categorise your downloads into meaningful sections. Categories allow grouping of download files and aids in finding what you are looking for.



The *Publisher* field documents the name of the publisher of the file.

The *License* field is used to document the licence restrictions/requirements for the file.

The *Overview* field allows you to enter a short note describing what the file is used for.

The *Requirements* field allows you to specify whether any requirements or conditions are needed in order to use the file. For instance, a machine readable document may require Adobe Acrobat Reader™ installed on the PC in order to view it.

ID	Title	Category	SubCategory
+ KB1	How to upgrade to Windows 7	Computer	PC
+ KB10	Problem with File	Computer	PC
+ KB13	How to reset Fax Machine Error 1005	Peripherals	Fax Machi
+ KB14	Home Access	Software	CSE Work
+ KB15	Not being able to login from home	Software	CSE Work
+ KB16	Home Access Portal - Network not found error	Software	CSE Work

The *Instructions* field can be used to briefly document how to user the file.

Knowledge Base (KB) allows you to link download files with relevant knowledge base articles. The linkage works both ways, as the KB will also automatically reference linked download files.

When you click the **Add KB Article** button you will be presented with a form containing all current KB articles. Select the articles you want to link the download files to, and click the **Add Selected KB Article(s)** button.

The selected KB articles are now associated with this download. If you wish to add additional KB articles, simply repeat the process above.

If you want to remove a KB article, highlight the one you want and press the **Remove KB Article** button.

Finally to commit the changes and upload the file to the Service Manager system, click the **Save Download** button in the toolbar. You will see the progress of the file upload as it takes place. When complete, close the form.

ID	Title	Category	SubCategory
+ KB1	How to upgrade to Windows 7	Computer	PC
+ KB13	How to reset Fax Machine Error 1005	Peripherals	Fax Machi
+ KB14	Home Access	Software	CSE Work
+ KB15	Not being able to login from home	Software	CSE Work
+ KB16	Home Access Portal - Network not found error	Software	CSE Work

When you look at the download section within an appropriate Service Manager Portal, you can see all the downloads your login user is allowed to see.

The various filter controls and search capabilities ensure that you can quickly narrow down your search for files.

To access a particular download, simply double click its header.

Notice that there are links added that will redirect you to the associated KB articles. Clicking on these will take you directly to the appropriate KB article.

The rating system depends upon the end users clicking the Download was helpful or Download was not helpful links. This helps in terms of ranking downloads (and KB articles for that matter), so popular subjects are highlighted and more easily found.

Title	Created On	Rating	ViewCount
(KB14) Home Access	25/02/2010 08:37		
The home access portal is accessed via a secure website, the URL is			
(KB15) Not being able to login from home	25/02/2010 08:41		
Some users have reported getting not authorised when logging			
(KB16) Home Access Portal - Network not found error	25/02/2010 08:43		
When accessing the Schools Home Access Portal, an error saying			

If you skip to the Service Manager KB and search through the Software and Workspace Explorer KB articles, you will see the three articles we linked our download file to.

Double clicking one of the KB articles displays its contents.

Note that towards the bottom there is a link to download the file from the download section.

Clicking the link will allow you to open the file directly (in the case of a document) or save the file to a local location for later use.

(KB15) Not being able to login from home

Category
Software | CSE Workspace Explorer | All ThirdCategories

Description
Some users have reported getting not authorised when logging into the schools home access portal

Cause
Account has not been authorised.

Solution
Students and Staff must sign and return the Home Access Agreement. Without this document, the end users account will not be authorised to use the Schools Home Access Portal (SHAP)

Resolution
SHAP authorisation required

Keywords
KB15,

Download Files
CSE Workspace Explorer - Staff Manual (3.25 MB)

KB Article was helpful KB Article was not helpful ★★★★★

Comments [Add Comment](#)

Preferences/Knowledge Base

A properly maintained and managed Knowledge Base can form a cornerstone of a good service desk. It provides a place where solutions to known issues can be posted, enabling end users to 'self-help' in terms of looking up issues that they might be having.

Not only does this benefit the service desk responders in terms of workload, but it also importantly means that the end users can rectify issues themselves much more quickly than waiting for service desk responses to be posted back.

Knowledge Base articles can be generated either by adding them manually into the system via the admin portal, or by adding resolved Service Requests directly into the database. In addition, KB articles can be linked directly to files in the download section.

ID	Title	Category	SubCategory	ThirdCategory
KB1	How to upgrade to Windows 7	Computer	PC	How to?
KB10	Problem with File	Computer	PC	can not open file
KB13	How to reset Fax Machine Error 1005	Peripherals	Fax Machines	Error
KB14	Home Access	Software	CSE Workspace Explorer	
KB15	Not being able to login from home	Software	CSE Workspace Explorer	
KB16	Home Access Portal - Network not found error	Software	CSE Workspace Explorer	
KB17	A monitor display is upside down	Computer	Monitor	Does not work proper

Knowledge Base Settings is the section where the general behavior of the Knowledge Base is controlled.

When closing Service Request, ask whether to add to Knowledge Base.

When Service Manager Responders (Admin and/orTechnician) close a Service Request, you have the option of generating a prompt that asks whether the Service Request should be added to the Knowledge Base.

Allow comments to be added to KB articles

Pre approve comments

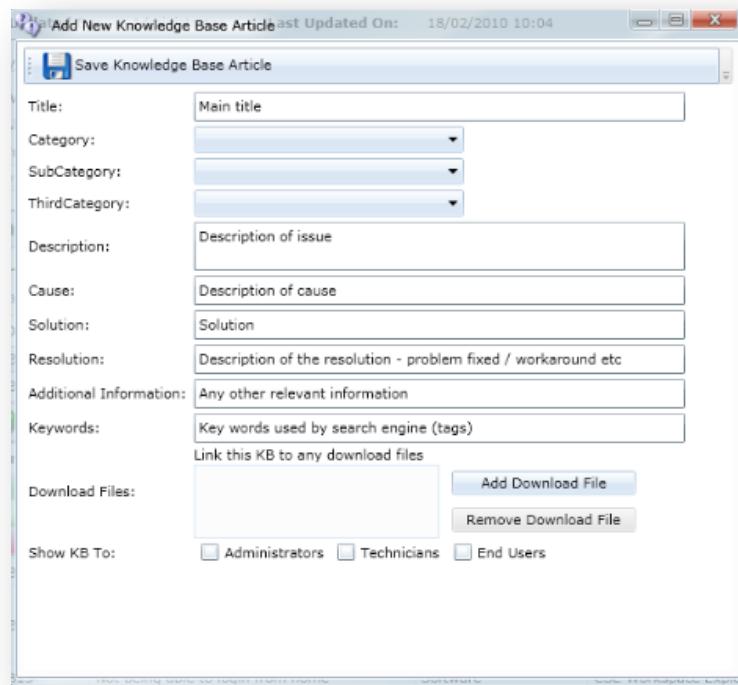
Knowledge Base users can be allowed to add comments related to KB articles.

End user comments can be automatically approved, or the Service Manager Administrator can manually approve them.

When you have made your selections, click the Save button.

 Add New KB Article

This button opens the KB Article data entry form.



The screenshot shows the 'Add New Knowledge Base Article' dialog box. The 'Title' field is set to 'Main title'. The 'Category', 'SubCategory', and 'ThirdCategory' dropdowns are empty. The 'Description' field contains 'Description of issue'. The 'Cause' field contains 'Description of cause'. The 'Solution' field contains 'Solution'. The 'Resolution' field contains 'Description of the resolution - problem fixed / workaround etc'. The 'Additional Information' field contains 'Any other relevant information'. The 'Keywords' field contains 'Key words used by search engine (tags)'. Below these fields is a section for 'Download Files' with 'Add Download File' and 'Remove Download File' buttons. At the bottom, there are checkboxes for 'Show KB To' labeled 'Administrators', 'Technicians', and 'End Users'.

Title - This is the main title for the KB Article.

Category - Select the category that this article belongs to, using the list box. This allows users to search and group KB articles quickly.

Sub Category - Select relevant sub category from the list. This further aids in searching and KB grouping.

Third Category - Select relevant Third Category from the list, further aids searching and KB grouping.

Description - This field allows you to describe the issue.

Cause - This field allows you to describe what actually causes the issue.

Solution - This field allows you to document the solution.

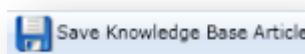
Resolution - Documents the outcome.

Additional Information - Allows you to document any additional supporting information

Keywords - allows you to add your own search tags (keywords). This makes searching the KB much more efficient.

Download Files - Allows you to link the KB to files held in the download section.

Show KB To - Defines who can see this KB article.



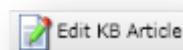
Click to save your KB article when data entry has been completed.

KB Article Controls

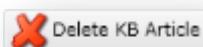
Across the top of the KB Article table are a number of control buttons.

 A screenshot of a Microsoft Excel-like table interface for managing KB articles. The table has columns for ID, Title, Category, SubCategory, and ThirdCategory. Row 1 (header) has a "Group Header" label and a "Drag a column header and drop it here to group by that column" instruction. Rows 2 through 7 show data: KB1 (Title: "How to upgrade to Windows 7", Category: Computer, SubCategory: PC, ThirdCategory: "How to?"), KB10 (Title: "Problem with File", Category: Computer, SubCategory: PC, ThirdCategory: "can not open file"), KB13 (Title: "How to reset Fax Machine Error 1005", Category: Peripherals, SubCategory: Fax Machines, ThirdCategory: Error), KB14 (Title: "Home Access", Category: Software, SubCategory: "CSE Workspace Explorer"), KB15 (Title: "Not being able to login from home", Category: Software, SubCategory: "CSE Workspace Explorer"), KB16 (Title: "Home Access Portal - Network not found error", Category: Software, SubCategory: "CSE Workspace Explorer"), and KB17 (Title: "A monitor display is upside down", Category: Computer, SubCategory: Monitor, ThirdCategory: "Does not work proper"). The top of the table has buttons for "Add New KB Article", "Edit KB Article", "Delete KB Article", and "View Unapproved Comments".

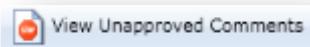
Group Header				
Drag a column header and drop it here to group by that column				
ID	Title	Category	SubCategory	ThirdCategory
KB1	How to upgrade to Windows 7	Computer	PC	"How to?"
KB10	Problem with File	Computer	PC	"can not open file"
KB13	How to reset Fax Machine Error 1005	Peripherals	Fax Machines	Error
KB14	Home Access	Software	CSE Workspace Explorer	
KB15	Not being able to login from home	Software	CSE Workspace Explorer	
KB16	Home Access Portal - Network not found error	Software	CSE Workspace Explorer	
KB17	A monitor display is upside down	Computer	Monitor	"Does not work proper"



Select the KB article the table and click to edit its contents. The form allowing you to edit existing KB is exactly the same as the form used above when entering a new KB article.



Select the KB article from the table and click to delete. This requires confirmation before the article is actually removed from the KB.



Click to display all unapproved comments attached to KB articles.

To approve a KB comment, highlight the record and click the **Approve Selected Comment** button.

To delete a KB comment, select the record from the list and click the **Delete Selected Comment** button.

Note that you can use **Ctrl+right click** to select multiple records to add or delete.

Both adding and deleting records will require confirmation before being processed.

View All Unapproved KB Comments				
	<input checked="" type="checkbox"/> Approve Selected Comments	<input type="checkbox"/> Delete Selected Comments		
CommentID	Username	Full Name	Email	Comment
1	st.D.ABRAM	Abram	Abram@tbs@anywhere.sch.uk	I don't seem to be able to load the attached document fr
2	st.D.ABRAM	Abrams		Soory - my mistake, I don't have Adobe Acrobat loaded on
3	st.D.ABRAM	niles crane		please note - password are case sensitive
4	st.D.ABRAM	martin crane		Thanks for the access to the staff manual
5	st.D.ABRAM	Peter Pan	p.pan@netherlands.com	I'm using Chrome at home and having some issues with
6	st.D.ABRAM	Judith Cann		I still get errors about name not found.
7	st.D.ABRAM	Peter Perfect		I have no problem accessing the system from home.
8	st.D.ABRAM	Muttly Desterley	Mutt@desterly.net	I just use TBS as the network name - no problem here ei

KB Article Table

The KB Table displays all current KB articles hosted by Service Manager. The top line of the dataset contains the database field headers (column descriptions - ID/Title/Category etc.)

Group Header				
Drag a column header and drop it here to group by that column				
ID	Title	Category	SubCategory	ThirdCategory
+ KB1	How to upgrade to Windows 7	Computer	PC	How to?
+ KB10	Problem with File	Computer	PC	can not open file
+ KB13	How to reset Fax Machine Error 1005	Peripherals	Fax Machines	Error
+ KB14	Home Access	Software	CSE Workspace Explorer	
+ KB15	Not being able to login from home	Software	CSE Workspace Explorer	
+ KB16	Home Access Portal - Network not found error	Software	CSE Workspace Explorer	
+ KB17	A monitor display is upside down	Computer	Monitor	Does not work proper

Double clicking a KB article record will automatically open the KB Edit form.

Here you can make changes to the KB article, such as updating the solution field or adding a download file to the list.

Service Manager has some powerful dataset table formatting commands built into it. Whenever a dataset table is presented to you, as in the case of the KB Article Table, you can format and sort the dataset to help you navigate through the data being presented.

As these are generic in nature and are available in different locations within Service Manager, we have documented these formatting controls in a separate chapter.

Against each KB record you will see a small + icon. Clicking this expands the record to display usually hidden information that is associated with the record. In the case of KB articles, this will show any comments that have been added by end users.

KB15 Not being able to login from home Software CSE Workspace Explorer				
<input checked="" type="checkbox"/> Approve Selected Comments <input type="checkbox"/> Delete Selected Comments				
CommentID	Username	Full Name	Email	Comment
3	st.D.ABRAM	niles crane		please note - password are case sensitive
4	st.D.ABRAM	martin crane		Thanks for the access to the staff manual
5	st.D.ABRAM	Peter Pan	p.pan@netherland.com	I'm using Chrome at home and having some issues with the

Here we can see that KB15 has three unapproved comments added by users who have accessed it. Using the controls, you have the option of being able to approve or delete the comments as appropriate.

Comments highlighted in red are unapproved, whilst those highlighted in green are approved.

Preferences/Messaging/Outgoing Emails

Service Manager includes a client that is capable to sending emails to SMTP hosts.

Generally speaking, most establishments will be using one of two types of email system. These are self-hosted or remote hosted systems. A self-hosted system is typically an exchange server, whilst a remote hosted system is one that is generally provided externally by an ISP, such as RM EasyMail™ (or equivalents hosted by other providers).

Outgoing Emails

Last Updated By: Administrator **Last Updated On:** 3/31/2010 10:42:48 AM

SMTP Host Name:	ash.nibbles.local
SMTP Port:	25
From Email Address:	sddesk@nibbles.local
Display Name (optional):	CSE Service Desk
Username (optional):	supervisor
Password (optional):	*****
Domain (optional):	nibbles.local
Encoding:	UTF-8
Content type:	Html

Is SSL Secure

Buttons: Save Changes, Undo Changes, Test Settings

The client uses SMTP to send messages to the email host system. This is a universally accepted means by which application clients send messages. If in doubt, please contact your email provider for additional details.

In the example above, the system is configured to use a self-hosted system contained within the local domain. The server is actually an MS Exchange Server. The SMTP host name takes the form of a *Fully Qualified Domain Name* (FQDN). The server hosting our exchange server is called ASH and it is a member of the NIBBLES.LOCAL domain. It is also acceptable to specify an IP address. Please note that if you use an FQDN, make sure that your specified DNS servers can resolve it as specified. To check this, drop into a DOS Box on any server or station and enter the command PING ASH.NIBBLE.LOCAL (use your own FQDN) and press return. If the system responds with a series of successful pings, resolved to a physical IP address, then you are OK.

If the system fails to respond, your DNS servers do not have the required record to resolve, in which case you could attempt to fix the DNS servers by entering a manual entry, or simply use the mail server IP address.

The SMTP port should be by definition 25. However it is not unknown for some external systems to use different port numbers. Please check with your service provider.

The *From Email Address* is the account that the email appears to be being sent from. You might want to specify a real and active email account for this as some third part email hosts will check that this is a real account. If they find out that it is a phantom address, they might block emails from this address as potential spam. If in doubt, check with your mail provider.

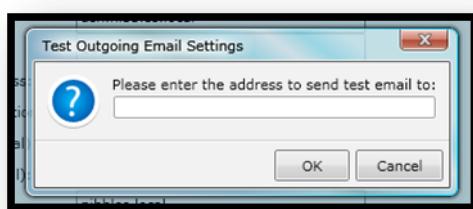
Whilst SMTP evolved on a trust model, today's reality is that many email systems (including exchange servers) might require authentication when sending mail via SMTP, in which case please specify a valid user name and password. Again, check with your email provider if in doubt.

The *Domain* setting is normally not needed when sending to an external SMTP server, but you should include this if you are sending to an internal MS Exchange server.

Encoding defines the format by which your email is configured before being sent. Then UTF-8 format (8 bit Unicode Transformation Format) is probably the most commonly used email format. However, the system does support other commonly used email encoding system. Our advice is to stick with UTF-8 and only change if your ISP demands a different format.

Content type can either be HTML or plain text. Our advice is to use HTML format.

Finally, there is an option to use SSL (Secure Socket Layer) communication protocols when accessing the SMTP server. This system ensures that over the wire transmission of emails is secure and encrypted. The simple way of knowing if your system requires SSL switched on is to look at the URL normally used to access your email portal via the web. If the URL starts with https, then you have to tick the *Use SSL* tick box.

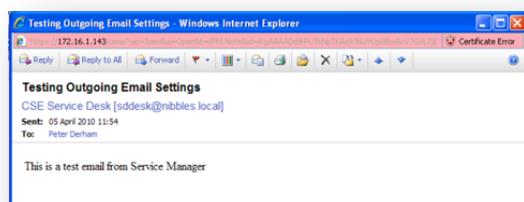


We have included a **Test Settings** button and it provides a quick confidence check the settings entered are going to work.

You will be prompted to enter a valid email address: please use one that you have immediate access to.

After a short delay - and if everything is working - the system will return saying that the email has been successfully sent.

Now check the email account you used to check that the test email has been received. If you are using external email, you might need to wait for several minutes to allow for latency in the system.



Once you have configured your options and checked that everything works, click the **Save Changes** button.

Preferences/Messaging/Inbound Emails

An innovative feature of Service Manager's messaging system is its ability to pick up emails and automatically enter them as service requests. The system is very flexible and provides multiple protocol support and multiple input account streams.

Multiple input accounts are a unique feature in that you can feed in email requests from multiple external email accounts. This allows you to publish several email addresses that end users can post to, each account for a different purpose. For instance you could publish an email address that parents can use to report issues directly to the school's office staff. The system can then pick up emails sent to that address and automatically enter them into the database, re-directing them to someone in the school's office to process.

The system supports POP3, IMAP, EWS2007 and EWS2010.

POP3 (Post Office Protocol) supports simple download-and-delete requirements for access to remote mailboxes and is supported by most major email systems. This includes most of the free email carriers, as it provides a mechanism for smart phones to connect and retrieve emails.

IMAP (Internet Message Access Protocol) is an internet protocol that allows an email client to access email on a remote mail server.

EWS2007 and EWS2010 are proprietary protocols that allow email clients to retrieve emails held on Microsoft Exchange 2007 and 2010 servers.

By supporting these main email protocols, CSE Service Manager will be able to retrieve emails from virtually any mail system available.

Inbound Email Principle

The principle is to expand the methods by which your Service Manager end users can input service requests into the system. One of the obstacles to the effective use of a service desk system is engaging the end user and getting them to use the system. Whilst the end user web portal has been designed to provide a quick and easy way of entering and monitoring requests, it might put some people off. Sending an email with a problem request might be seen by some as easier and quicker option. Certainly, it means that there may be additional processing by the Service Manager administrators and technicians, but anything that stimulates and engages your end users is a positive development.

It also increases the flexibility of the system: users can simply email from anywhere, using any device.

The ability to specify multiple email accounts allows you to build in some control, because you can route service requests more effectively based on the source they are coming from.

For example, emails sent to a facilities management account can automatically be input into one of the specific facilities management Service Manager categories. This means that Service Manager's internal systems will route the call to the correct technician, apply the correct SLA and send notifications as appropriate.

Email accounts can be anywhere. You could use externally hosted accounts on Hotmail or Gmail, or internal accounts hosted on your own Exchange servers. Of course, you will need to create these accounts in the first instance.

Inbound Email Polling

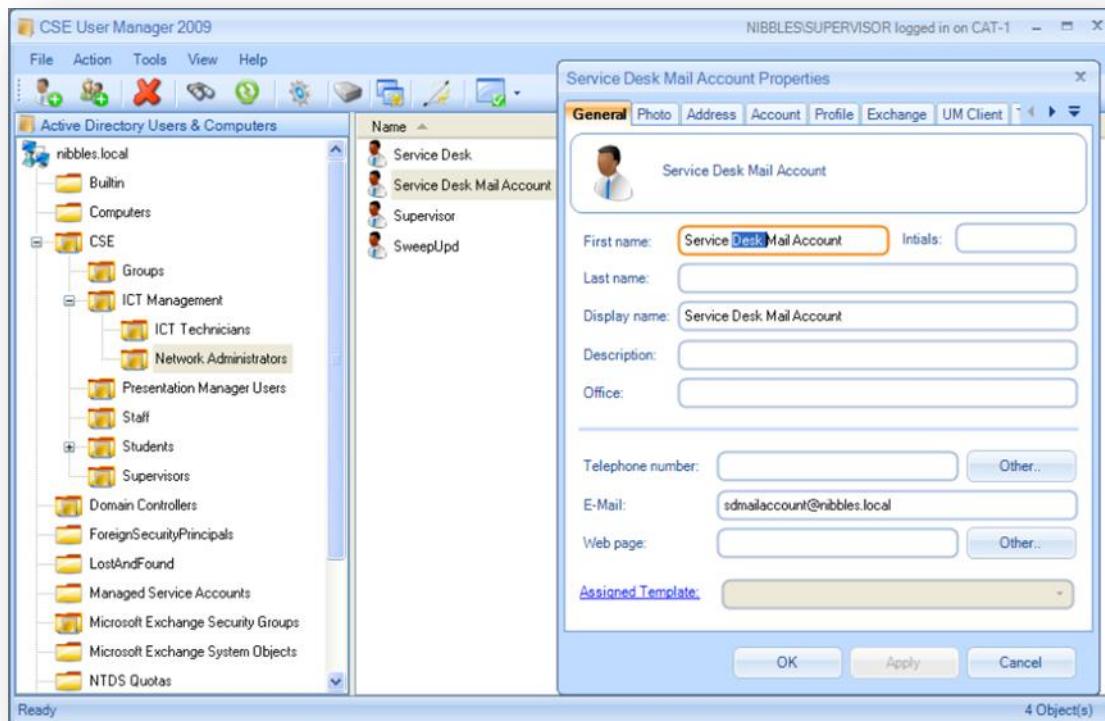
The system polls inbound email accounts approximately every minute. The Service Manager server service updates the database every minute as well, so it can take up to two minutes for an email to be downloaded and input as a service request. The polling times can be adjusted in order to optimise the system, but you need to contact CSE for guidance on doing this.

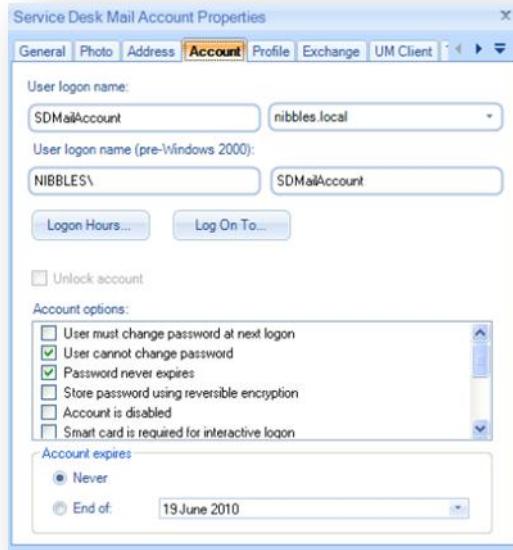
Setting up inbound email from an Exchange Server

In this scenario you have an Exchange 2007 server within your establishment.

The first thing you need to do is set up a new mailbox that your end users will send service requests to. You will need to know the account name and the password. If linking this email account to a domain account (recommended), make sure that the password meets your password complexity policy and that the password never expires and cannot be changed.

Here we have set up an account within the ADS called SDMAILACCOUNT, and have used CSE User Manager to create an Exchange mailbox for that user automatically.

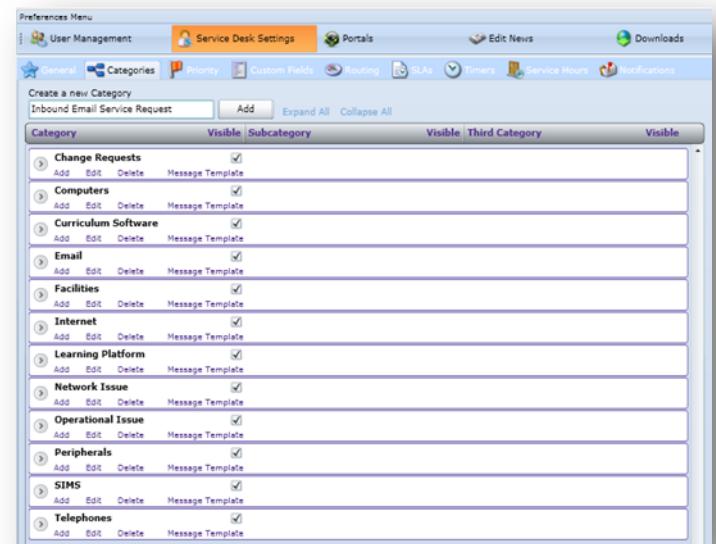




The account properties have been set so that the user cannot change the password and that it never expires.

The next step is optional, but it is useful to create a service request category specifically for the capture of inbound email service requests. In this way, all imported service requests can be grouped together and then managed by the administrators and technicians.

Create a new service request category under Service Manager settings called *Inbound Email Service Requests*. In this instance there is no need to create any sub categories. This category will provide a catch-all place where inbound service requests will be placed.



Under preferences menu, select the Messaging option. At the bottom of the display you will see the Incoming Emails section. To create a new inbound connection, click the Add Incoming Email button.



Click the plus sign to expand the new entry.

Give the new entry a meaningful name
- in this instance we call this configuration 'SD Exchange 2007'

Then expand the Protocol list box and select the EWS2007 option.

This is a proprietary protocol, but is the best option when dealing with an Exchange 2007 server.

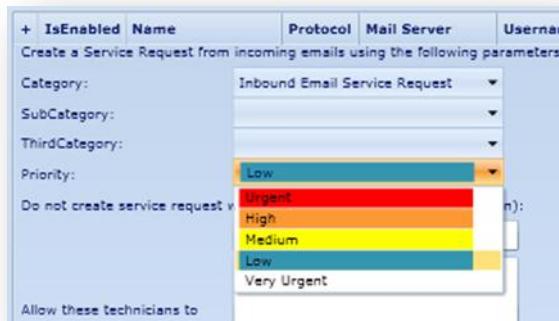
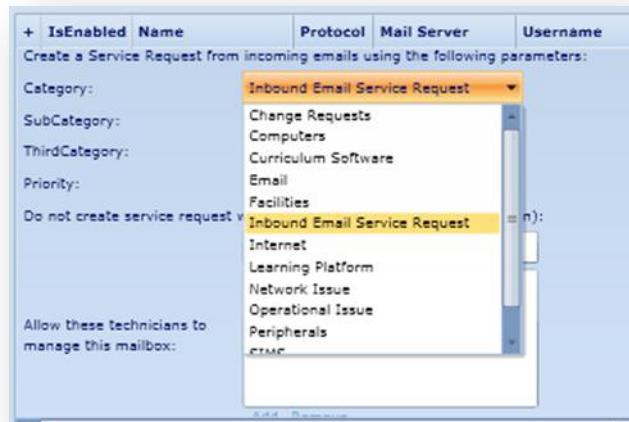
Then add the mail server's address, The account name, password and domain name.

Because this is an Exchange 2007 server, you will need to tick the use SSL box.

If you want to import any email attachments into the service request (they are added as Service Request Attachments), then tick the box.

The system can be set to only allow emails from registered Service Manager users. This will prevent students who discover the email portal from sending malicious requests into the system.

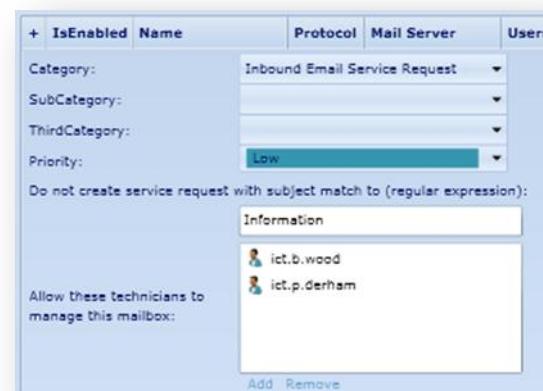
The next step is to select the category in which you wish emailed service requests to be placed. From the Category list box, select the Category that we created earlier.

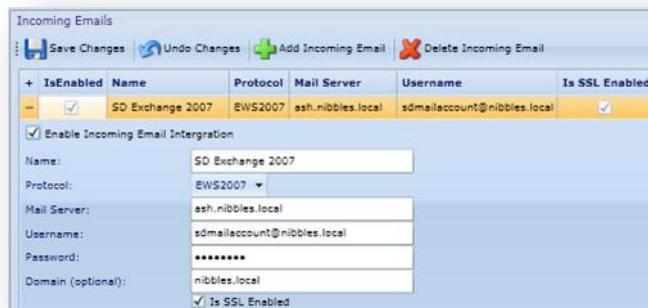


Then select the priority you want to assign to these requests by selecting the setting from the list that appears.

You can filter based upon the subject field contained within the email. In this way you could block certain emails from being automatically added to the database. For instance, if you specified 'Information' in the subject header of any email, then it won't be added automatically into the database as a service request.

Lastly, you can add grant additional email management functions to specific technicians. We will look at these additional management tools later on in the manual.

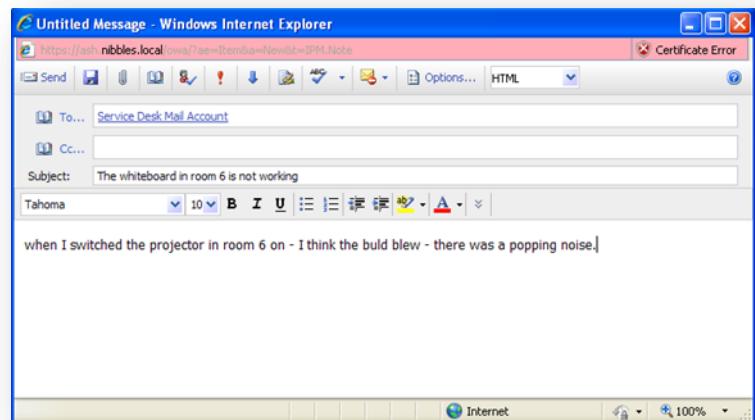




When you have finished making your settings, don't forget to tick the Enable Incoming Email Integration tick box, and click the Save Changes button.

Testing Incoming Email

The next step is to test the incoming email system. Ask someone to send a test email to the incoming account we set up earlier.



E-Mail Addresses

As we have said before, the system integrates with the domain's Active Directory. If you are running an Exchange server within your domain, Exchange email addresses will be resolved automatically by looking up the relevant AD user account property. There is nothing else needed; the system will use the correct user's email address.

However if you are using external web-based email, your Active Directory will not contain your external email addresses. In this case you have one of two choices. The first is to manually populate the Active Directory with valid external email addresses for each of the Service Manager end users. The second option is to instruct your end users that they will need to manually add their own email addresses to their accounts using the My Settings option within the End Users Portal. They will need to enter their external email address into an alternative property location within the system's Active Directory.

The screenshot shows the 'User Portal Menu' on the left with options like 'Submit Service Request', 'Your Service Requests', 'Knowledge Base', 'Downloads', and 'MySettings'. The 'News' section on the right shows a post from 'Lions' posted by 'Administrator' on '08/03/2010'. The main content area is titled 'Last Updated By: MySettings' and 'Last Updated On:'. It shows the 'Theme' set to 'Windows7'. Under 'User Settings', the 'UserName' is 'st.CALDO' and the 'Primary Email' is 'st.CALDO@nibbles.local'. There are fields for 'Additional Email', 'IM Address', and 'Mobile (SMS)'. At the bottom are 'Save Changes' and 'Undo Changes' buttons.

In the example to the left, you can see that the Primary email address has been resolved from the Active Directory as this user has an existing MS Exchange Account. If you do not have a domain-based Exchange Email system, this box will be blank.

If - and only if - this is blank, you should enter a valid external email address. This will update your Active Directory account information.

Below is a space where an additional email address can be entered. If you enter an email address here, messages will be directed to that account as well.

The IM Address and SMS Mobile number options are not yet implemented, and will become available in a future release of the system. However, you can always enter these if you already know them.

When finished making any changes, click the **Save Changes** button.

Please note - you will only be able to make changes to the email IM address and SMS number fields if you are a member of the domain administrators group.



Primary Email is filled in automatically if you have a domain-based MS Exchange server. The Exchange system does this for you when your account is created. It is used by the system to automatically route emails to you, and is therefore an important setting. It is vital that if this field exists that you do not change it, otherwise other important systems may not operate correctly.

Chapter 3

Service Manager Reporting

In the new release of Service Manager (from version 2011.2.2.2 onwards) we have significantly enhanced the reporting capabilities of the product. In addition to the previous fixed reports, we have now added the ability to generate your own custom reports.

We have also introduced a new fixed report template that enables you to create reports that measure performance against key performance indicators that are configured as part of your SLA regime. We briefly touched on the measurement and measurement items constructs in the section describing SLAs, but the real value of these belongs in this section of the manual.

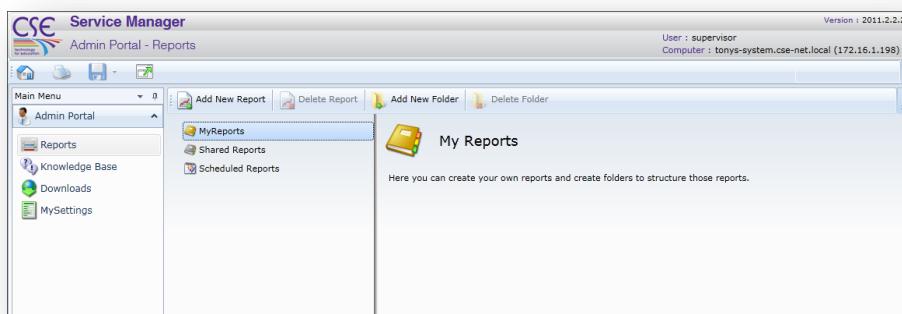
From the Service Manager administrator's perspective, the reporting module is found under the Admin Portal menu. Reporting is also available to your technicians and the module is found under the Technicians Portal.

Reporting System Features

- Fixed Generic Reports
- Fixed KPI/SLA Performance Reports
- Custom Report Builder
- Comprehensive Report Filtering
- Scheduled Reports Service
- Automated Emailing of Scheduled Reports
- Personal Reports
- Shared Reports

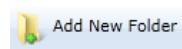
Report Console

The Report Console provides you with access to all the reporting tools.

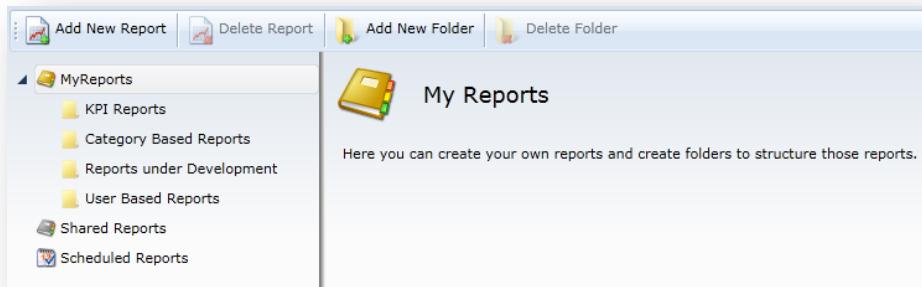


There are three main categories of reports, *My Reports* contains reports that belong to you and are only visible to you. *Shared Reports* are reports that have been created and then shared and made available to other Service Desk users. Finally there is *Scheduled Reports*, which have been scheduled to run at a certain time and date.

Across the top of the console is the toolbar and this contains the various controls available to you.

-  **Add New Report** Creates a new report under the header selected.
-  **Delete Report** Allows you to delete a selected report
-  **Add New Folder** Allows you to create a new folder structure under the header selected
-  **Delete Folder** Allows you to delete a folder

The folder tools allow you to create a structure under the various headers into which store and organise your reports. If you are working with reports a lot, it is probably a good idea to create a structure like that below in order to make things more organised.



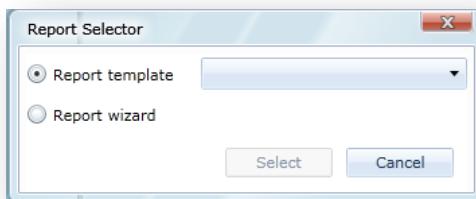
Each of the various headers provides repositories in which reports are stored. The general constructs of creating folders and creating reports are basically the same across all three. We will explore each one later in the chapter, but to start off we will concentrate on My Reports.

Report Types

Fixed Generic Reports

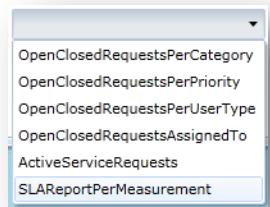
Fixed generic report templates provide a quick method for generating useful general reports about various aspects of the of your service requests. To create a report, click the My Reports folder (or sub-folder) to select the report location and then click the **Add New Report** button in the toolbar.

This starts the Report Selector Wizard.



With the Report template option selected, use the drop-down list box to select the fixed report from the selection that appears.

There is a choice of six different fixed reports. We will look at what each of these in detail. We will cover the final report that deals with SLA Measurements in a separate section as this is the report that measures performance against SLA KPIs.



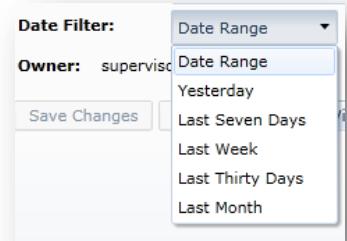
Open Closed Requests Per Category

The report name and report title fields are editable, and you can change these so that they fully describe the function of the report. Below are the various filters that are available, which include all three service request category types and a data range.

By default the date range selected will be for the last month's service requests.

You can select filters by accessing the corresponding list box and selecting the filter desired.

The date filter additionally has a number of quick selections, as well as being able to select a custom range using the calendar function that can be accessed by clicking the start and end date fields.



Created By: supervisor Created On: 01/09/2011 12:19
 Last Updated By: Last Updated On:
 Report Name: Open / Closed Hardware SR's
 Report Title: Open Closed Hardware Related SR's in the last month
 Category Filter: Category:
 Hardware
 SubCategory: All SubCategories
 ThirdCategory: All ThirdCategories
 Date Filter: Last Month From Date: 01/08/2011 To Date: 01/09/2011
 Owner: supervisor
 Save Changes Undo Changes View Report Share Report

In this example we have renamed the report name and title to more accurately describe its function.

We have selected the Hardware category and left the others to the All SubCategories and All Third level Categories.

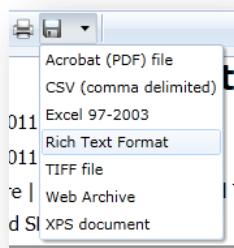
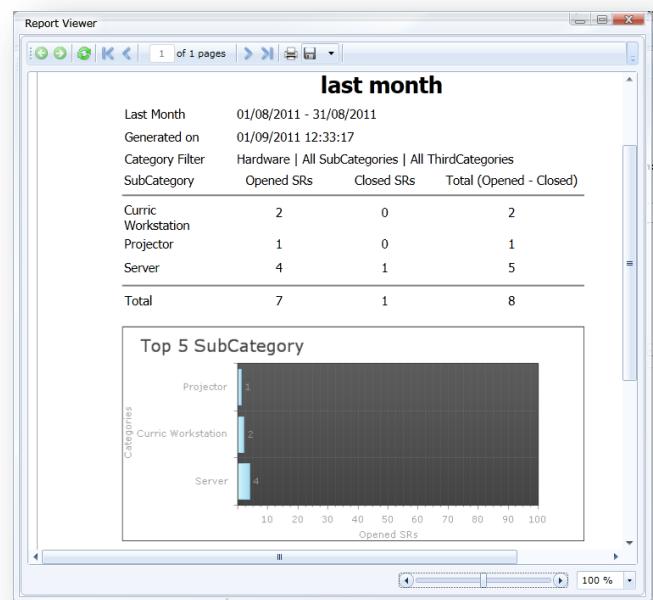
We have selected the date filter to extract details for the last month.

To see the report, simply click the **View Report** button. After a few seconds the report will be rendered and the result displayed within the report viewer window.

As you can see, this fixed report can generate useful reports relevant to state of service requests contained within the database.

The report viewer and its various controls and functions allow you to print or save the report in a variety of different document standards.

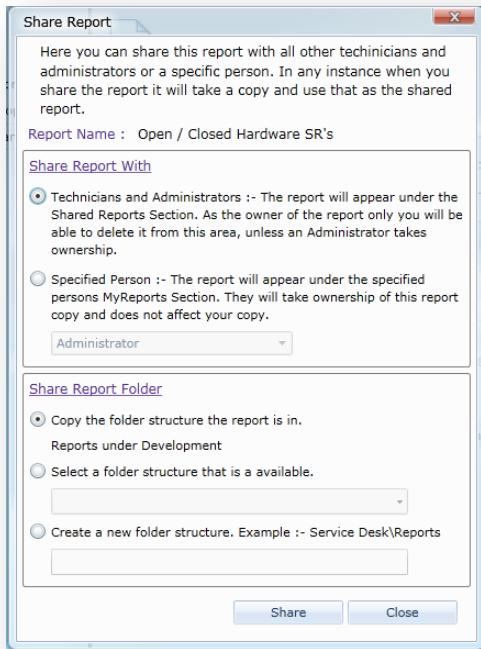
Clicking on the print button in the toolbar will allow you to select the printer that you want to re-direct the output to.



Clicking on the **Save** toolbar button will display the available document formats available. Simply select the one you want and then select the file name and location to put the output file.

When you are happy that the report is functioning as you want and you have configured the filters, click the **Save** button to commit the report to the system. You now have a report configured that you can revisit as required.

Once you have created the report, if you decide that you want to share the report with your Service Desk colleagues, simply click the **Share Report** button.



You will then be presented with the Share Report control, where you can then specify the conditions under which you want to share the report with your colleagues or even named individuals.

The control also enables you to control and specify where the report will be stored under the Shared Reports folder.

When you have shared your report, a copy is retained under your My Reports folder.

You retain a copy of the report, which is fully editable in your My Reports folder. The shared report cannot be edited or changed.

Open Closed Requests Per Priority



The Open Closed Requests Per Category report simply generates a report based on the predefined Service Desk priority levels. The only filter available relates to the date range that the generated report will cover.

The rendered report will look similar to this example.

Open Closed Requests Per Priority

Date Range: 01/08/2011 - 01/09/2011
Generated on: 01/09/2011 13:55:30

Priority	Opened SRs	Closed SRs	Total (Opened - Closed)
Medium	2	0	2
Hardware - CRITICAL	1	1	2
Hardware - URGENT	1	0	1
Hardware - Normal	1	0	1
High	1	0	1
Low	1	0	1
Total	7	1	8

Top 5 Priority

1 of 1

Open Closed Requests Per User Type

Open Closed Requests Per User Type

Created By: supervisor Created On: 01/09/2011 13:58

Last Updated By: Last Updated On:

Report Name: Open Closed Requests Per User Type

Report Title: Open Closed Requests Per UserType

Category Filter: Category: All Categories | All SubCategories | All ThirdCategories

UserType Filter: End User

Date Filter: Date Range From Date: 01/01/2011 To Date: 01/09/2011

Owner: supervisor

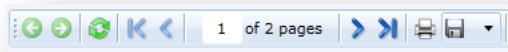
Save Changes Undo Changes View Report Share Report

Open Closed Requests Per User Type allows you to generate reports that detail the users who originated the service requests.

There are enhanced filtering options available so that you can specifically target the report's output. In addition to the three category tiers, you can also select the user type. Within the Service Desk there are three types of user, Administrator, Technician, or End User. You can make the appropriate selection using the list box.

In this example we have selected a much longer date range, which will result in the report capturing a lot more detail. In the rendered output below, the report now stretches across two pages.

The report viewer will always tell you how many pages the report includes. At the top of the viewer's frame is the page count and controls for navigating through the various pages.



User	Opened SRs	Closed SRs	Total (Opened - Closed)
R.Roper	0	5	5
r.almonet	0	18	18
R.Smylie	0	1	1
s.coles	0	1	1
S.Knight	0	2	2
V.Tomkinson	1	0	1
Total	9	180	189

Top 5 Users

2 of 2

Open Closed Requests Assigned To

Open Closed Requests Assigned To

Created By: supervisor Created On: 01/09/2011 14:28

Last Updated By:

Report Name: Open Closed Requests Assigned To

Report Title: Open Closed Requests AssignedTo

Category Filter: Category: All Categories, SubCategory: All SubCategories, ThirdCategory: All ThirdCategories

UserType Filter: Administrator

Date Filter: Date Range From Date: 01/08/2011 To Date: 01/09/2011

Owner: supervisor

Save Changes Undo Changes View Report Share Report

This report is useful as it allows you to generate a report that allows you to see which technician has Service Requests assigned to them.

Once again you can filter based on the three category tiers, The User Type (select from Administrators, Technicians or Unassigned) and the standard date range selection.

Active Service Requests

In Service Manager, Active Service Requests are requests that are not closed. They are either Open, On Hold or In Progress.

Active Service Requests renders a report detailing the service requests that fall with this specific category.

The standard category and date range filters are available, but there is a new Group Type filter included.

Active Service Requests

Created By: supervisor Created On: 01/09/2011 14:34

Last Updated On:

Report Name: Active Service Requests

Report Title: Active Service Requests

Category Filter: Category: All Categories, SubCategory: All SubCategories, ThirdCategory: All ThirdCategories

GroupType: Status

Date Filter: Date Range From Date: 01/05/2011 To Date: 01/09/2011

Owner: supervisor

Save Changes Undo Changes View Report Share Report

GroupType : Status

Date Filter: Category

Owner: supervisor

Status

Administrator

Technician

End User

Priority

Status

Save Changes

This allows you to further filter the reports output based upon Category, Administrator, Technician, End User, Priority and Status.

SLA Report Per Measurement

This report is more specialised and more complex to configure as it interacts with Timers, SLA Measurements and Measurement items. There is a separate section at the end of this chapter that describes the operation of this type of report.

Custom Reports

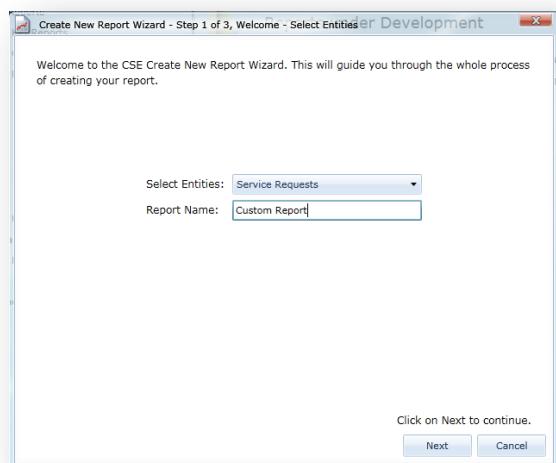
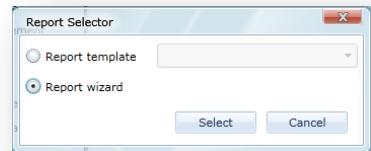
Whilst the standard generic reports provide plenty of opportunity to generate meaningful and useful reports regarding the state of play with your Service Desk, Custom Reports provide a massive expansion in terms of bespoke report generation.

By its very nature, the custom reporting system is capable of generating reports based on custom selected data fields from the CSE Service Manager database and multiple user-configured data filters. The system is capable of generating thousands of different report types.



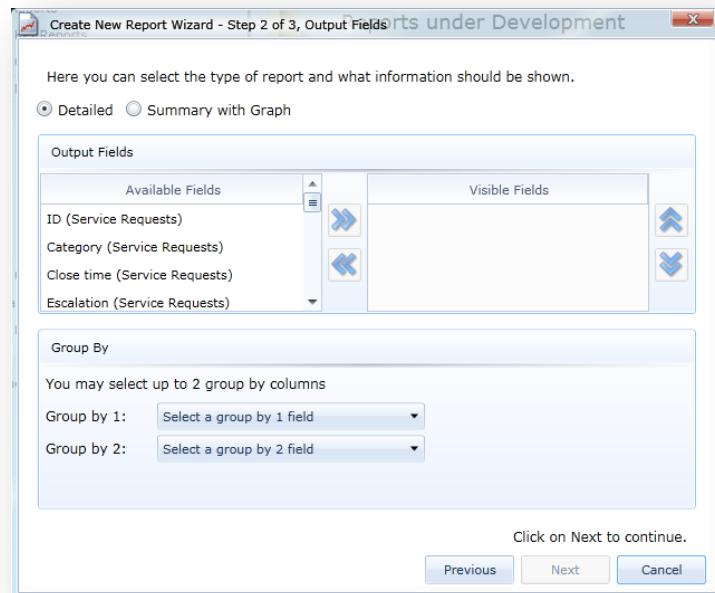
Whilst we have extensively tested this module to the best of our ability, there are likely to be combinations of data types and filters which we have not specifically tested and which might cause problems. Please contact CSE Technical Support with details of Custom Reports that fail to render properly.

To create a Custom Report, click New Report and select the Report Wizard option.



This starts the Custom Report Wizard. From the top list box select the *Service Requests* option and then type in a name for your custom report and finally click **Next** to continue.

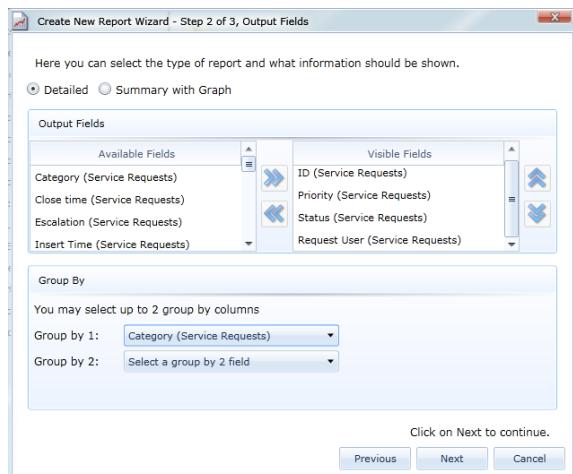
Step 2 allows you to define the type of report you want and select the dataset that you want the report to render.



Detailed

The detailed report option creates a table-based report displaying the fields you have added to Visible Fields. The Available Fields selection list contains all the standard Service Desk database field tags. Simply select the fields that you want the report to render, and move them into the Visible Fields frame using the arrow keys.

Within the Visible Fields frame, you can juggle the order of the displayed fields by highlighting the field tag and move it up and down the list using the up and down arrow buttons.



The *Group By* options allow you to render the report based on subheadings. For instance, if you wanted the report to group results by Category they are under, then simply select that field in the Group by 1 list box.

The resulting report renders as shown: the data is grouped under each of the individual category headers.

This is a method of formatting the rendered report data into a more usable format.

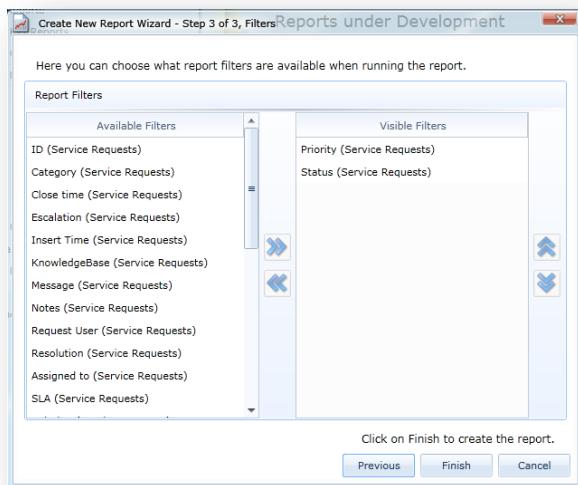
If you do not specify a Group By field, the resulting report will effectively have no formatting applied and will be displayed as a simple table of data.

It is worth mentioning that a simple table report has many uses, it effectively allows you to dump database reports, which can then be saved as Excel spreadsheets or CSV files. These can then be further processed and presented in many different formats using these external tools.

This illustration jumps ahead slightly, but it does neatly demonstrate what the Group By function achieves in terms of rendered output.

Custom Report			
Date Range	01/08/2011 - 01/09/2011	Generated on	01/09/2011 16:17:50
Category	Hardware	Status	Request User
417	Medium	Open	supervisor
418	Hardware CRITICAL	Open	Administrator
419	Hardware URGENT	Open	Administrator
420	Hardware - Normal	Open	Administrator
421	High	Open	Administrator
422	Medium	Open	Administrator
423	Low	Open	supervisor
424	Hardware CRITICAL	Closed	supervisor

1 of 1



Step 3 allows you to select the fields from the database that you want to filter the report using. Again, as when selecting the Visible Fields, you highlight the database tags you want and move them into the Visible Field frame.

Once the filters have been selected, you can use the up and down arrows to move the position of the selected fields within the list.

Click the **Finish** button to complete the report generation.

Your new report is now ready to run. You can select the filters as appropriate and then view the report.

Custom Report			
Date Range	Request User	Priority	Assigned to
01/09/2010 - 01/09/2011	M.Lewis	Urgent	Unassigned
01/09/2011 16:43:09	J.Bell	Urgent	Unassigned
	G.Jones	Urgent	Unassigned
	o.oleary	Urgent	Unassigned
	R.Binley	Urgent	Unassigned
	r.simonot	Urgent	Unassigned
	r.hattersley	Urgent	Unassigned
	R.Devigni	Urgent	Unassigned
	R.Devigni	Urgent	Unassigned
	R.Devigni	Urgent	Unassigned
	J.Pearl	Urgent	Unassigned
	o.oleary	Urgent	Unassigned
	r.hattersley	Urgent	Unassigned
	o.oleary	Urgent	Unassigned
	P.Morrison	Urgent	Unassigned
	R.Devigni	Urgent	Unassigned
	r.hattersley	Urgent	Unassigned
	J.Bell	Urgent	Unassigned
	o.oleary	Urgent	B.Tarzil
	J.Bell	Urgent	Unassigned
	o.oleary	Urgent	Unassigned
	r.hattersley	Urgent	Unassigned

1 of 5

Custom Report

Created By: supervisor Created On: 01/09/2011 16:37

Last Updated By: Last Updated On:

Report Name: Custom Report

Report Title: Custom Report

Priority: Equals Urgent

Status: Equals Open

Date Filter: Date Range From Date: 01/08/2011 To Date: 01/09/2011

Owner: supervisor

Save Changes Undo Changes View Report Share Report

As you can probably appreciate, the Service Desk has approximately 30 different database fields that you can include within your reports. This coupled with the ability to create your own multi-level filter selection, means that you have access to a vast number of different reports.

You will probably need to experiment with the various options in order to create a report set that meets your requirements.

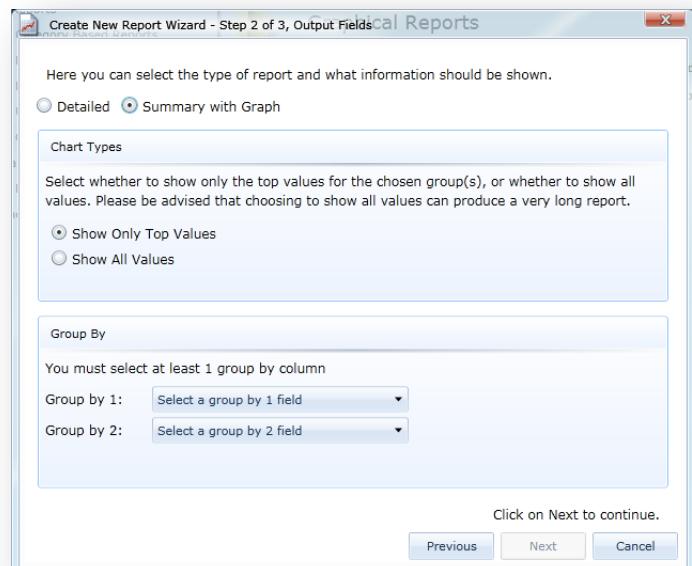
Summary with Graph

Whilst the detailed reports render reports in a tabular format and can be considered primarily as a method of extracting pure data from the database. Summary with Graph reports provide a useful snapshot of the status of service requests.

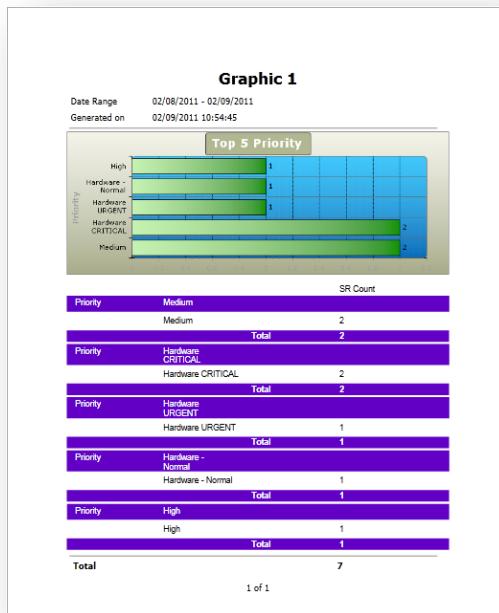
The system is again reasonably open format in terms of the database field selections available. However, these reports are designed to provide summary details and it is possible to construct reports that create too many data points to be effectively rendered into a sensible graphic. Care is needed in ensuring that the number of data points selected to be extracted from the database is kept manageable.

Start off by adding a new report and selecting the Report Wizard option. Select the Service Request option from the Entities list box and give the report a name.

Select the Summary with Graph option.



Show Only Top Values

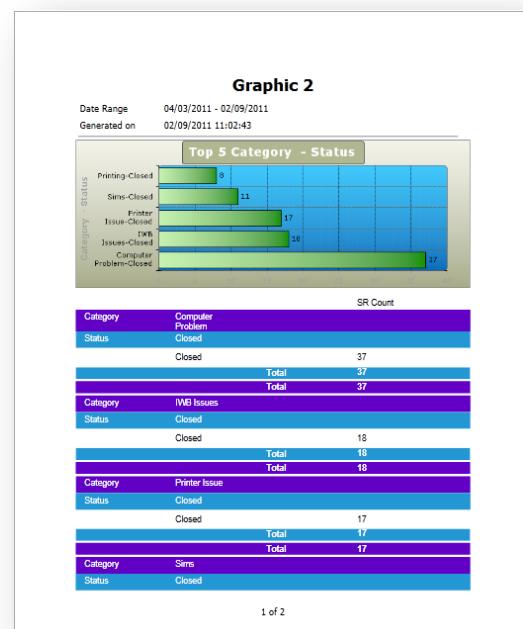


This option will render the report, but will only display the top 5 elements. This is a very useful graph for producing summary information.

The example displayed here shows the top 5 Service Requests by Priority entered in the last 20 days.

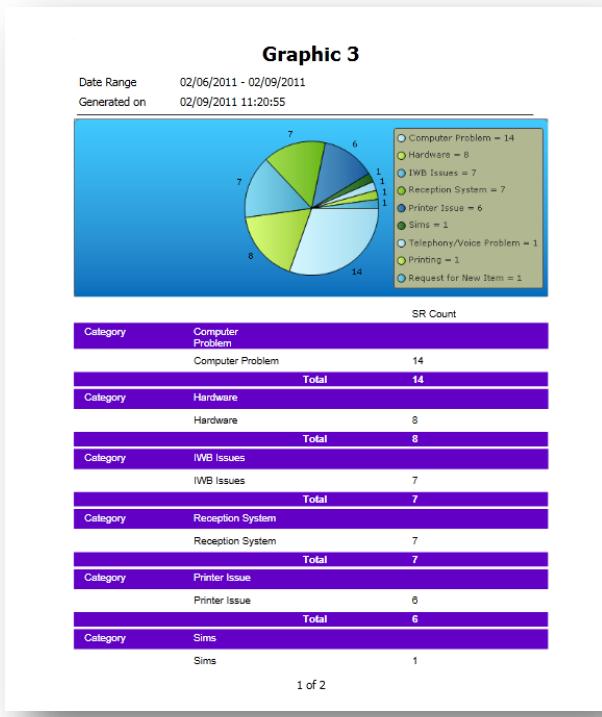
As with Detailed Reports you can refine your report rendering by specifying custom filters and then selecting the individual field ranges you are interested in.

This second example displays the top five Service Requests entered in the last six months by Category and Status.



[Show All Values](#)

The Show All Values option has the potential to extract many more data points than can effectively reside within a graph. For this reason you will probably want to experiment with the options available and create effective filters in order to reduce the data points extracted to a reasonable number (10 or less).



Here we have rendered a report that shows all values for Service Requests entered in the last three months, by category of request.

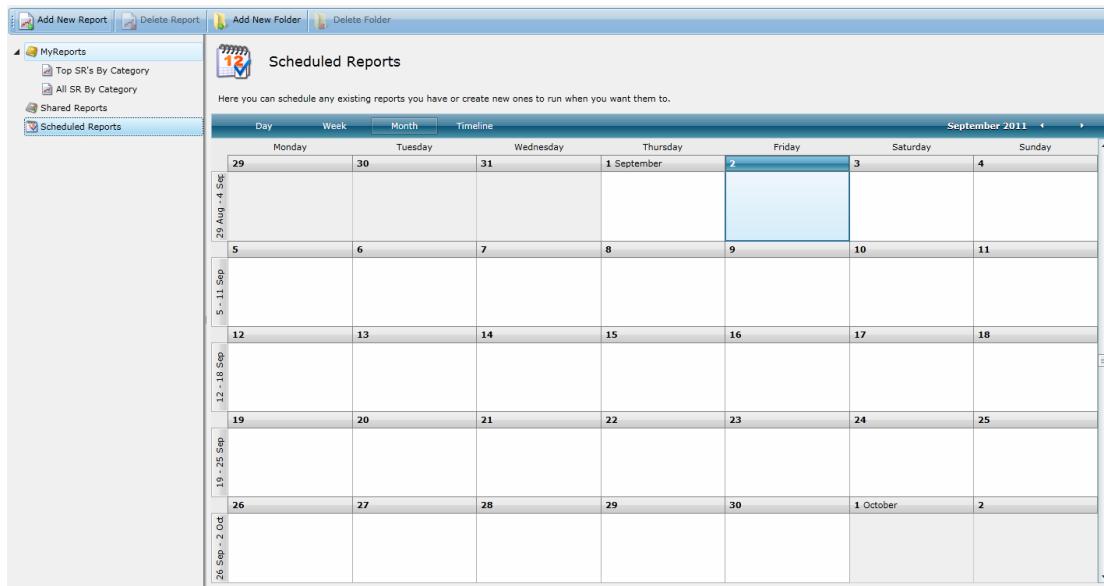
The resulting graph provides a good representation of the breakdown of calls entered into the database by their category.

These types of reports are very useful for quickly analysing trends in terms of issues being reported, as they provide a quick way of displaying a snapshot view.

If you identify a trend, such as an abnormally high occurrence of one particular brand of PCs failing, you could then revert back to a detailed report, where you can extract much more data and have access to better filtering options.

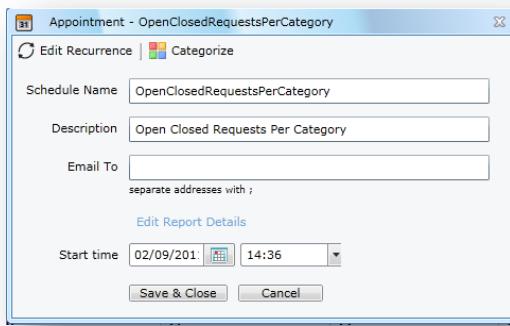
Scheduled Reports

Much of the design concept of Service Manager is to help automate processes in order to improve workflow and cut down on repetitive manual tasks. Therefore, being able to schedule reports to run and then automatically email the results to interested parties is an important addition to Service Manager's automation facilities.



When you select the Scheduled Reports folder, a calendar will appear, with the focus set on today's date. To create a scheduled report, select the date you want the report to run on and double click its cell. This will start the report wizard we have used previously.

At this point you simply select which type of report you want to create using the wizard.



When you have selected the report you want, the schedule appointment configuration screen will open. Here you can specify the schedule name and description.

In the email field you can enter the email addresses you want the rendered report to be sent to. Separate multiple recipients with semi-colons.

The start date and time will be the date of the calendar resolved by the cell you double clicked on, and the time will be the current system time.

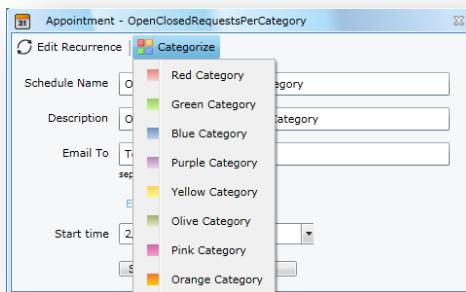
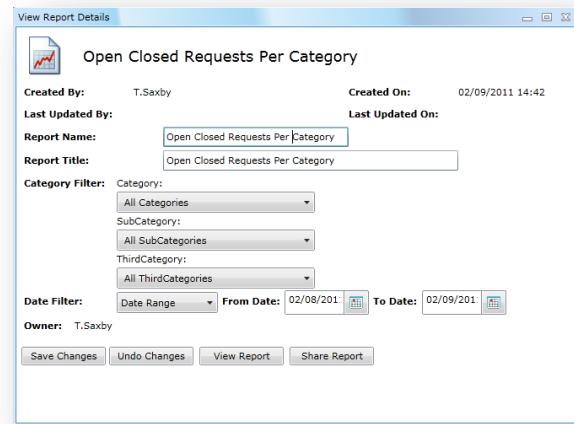
If you wish to change the date, simply click the calendar icon beside the start time date field and using the calendar tool, select the date you want.

To change the time either type in a new time (24hr clock), or use the pull-down list box to select an appropriate time frame.

Whilst we selected the report type using the wizard at the start of the process, we haven't configured any of the report parameters yet. To do this, click the Edit Report Details link. This opens the standard report configuration screen.

Proceed and make any config changes, you can use the **View Report** button to check the layout.

Click the **Save** button to finish.



Finally, you can set the schedule for the report to run by clicking the **Edit Recurrence** button.

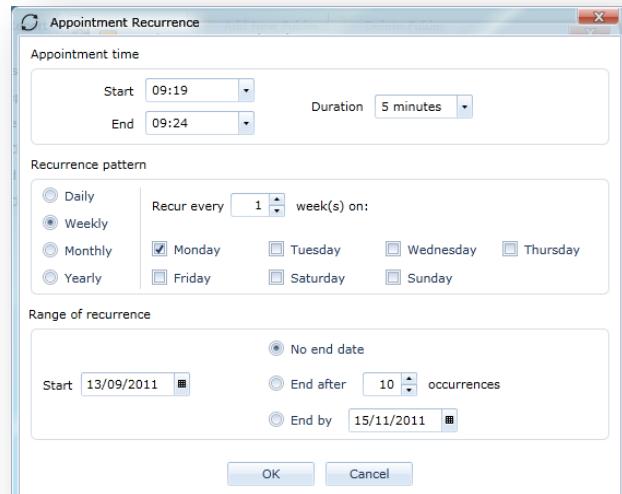
The start time will by default be the current system time. You should change this as appropriate.

You need to select a Duration value: we would recommend that you select a window of at least five minutes.

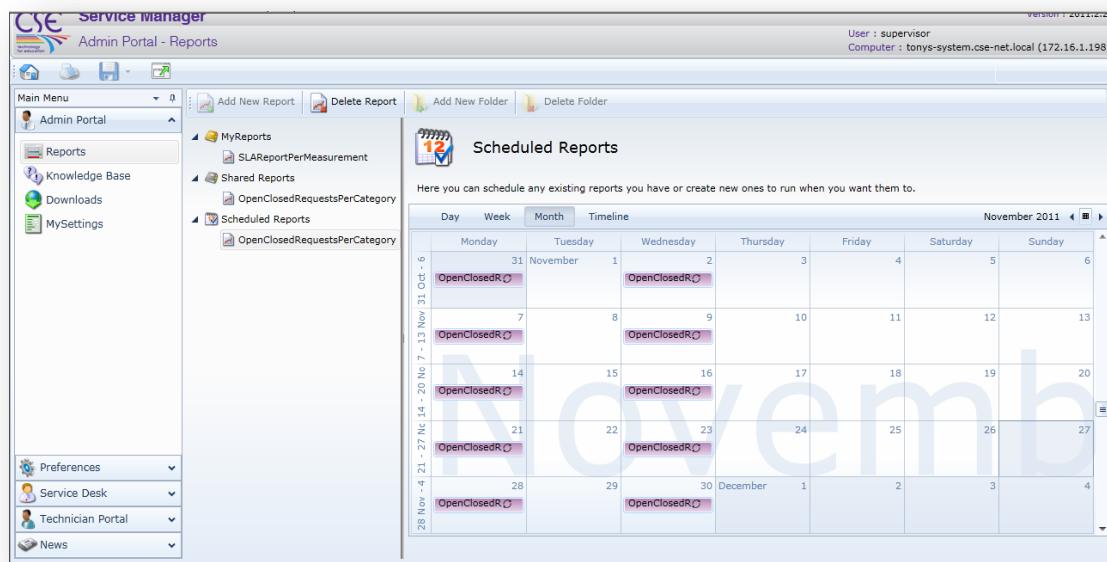
Then the recurrence pattern and date range can be selected. When complete, click **OK** to save the report to the database.

If you create multiple reports, you can colour code them so that they stand out when looking at the report schedule screen. To do this, click the **Categorise** button and pick from the various category colours displayed.

Click the **Save** button to update the schedule.



The calendar view now updates to show the report schedule. You can edit individual reports within the schedule simply by double clicking the corresponding entry. At this point you can edit either the individual job, or the whole sequence.



When a scheduled report is run by the system, it does so within the time window you specified. It is good practice not to run reports with overlapping time windows. The report is rendered as a PDF and is then automatically emailed to the recipients specified.

SLA Measurements and Reporting

In a previous section we discussed how SLAs can help to automate the escalation of service requests based on various timing parameters provided by the system through the custom timer features.

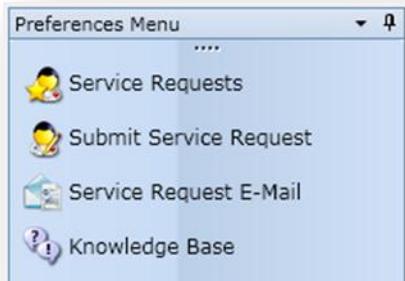
Whilst the SLA system provides the tools to automate the escalation process, it does not in itself provide any method by which you can measure performance against KPI targets that may be set. This is where Measurements, Measurement Items and Measurement Reports come into play.

In some respects these items and the reports that they produce are purely generating management information about the performance of the ICT Support Team in carrying out their duties. Measurement reports can be scheduled and then automatically emailed to interested parties.

Chapter 4

Service Manager Menus

This chapter is almost the same as the Technicians Portal Guide, in that it describes the main interfaces used to manage service requests.



Clicking on the Service Manager option opens the Service Manager Menu. Here you can browse the Service Requests that have been assigned to you.

Viewing and Managing your Service Requests

Clicking the Service Requests option will display all your Service Requests in tabular form. Assuming that you are logged in as the Service Manager Administrator, you will be presented with all the requests contained within the database, not only those assigned to yourself. To see only those requests that belong to you, click the **Assigned To Me** tab at the top.

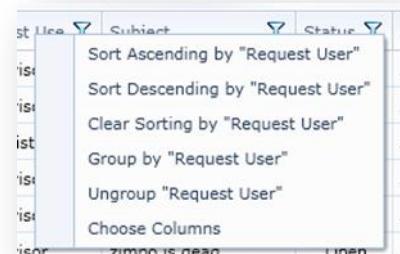
All	Open	In Progress	On Hold	Closed	Assigned To Me
Drag a column header and drop it here to group by that column					
Category	Request ID	Request Use	Subject	Status	Assigned To

Service Request Table Sorting



Double clicking any of the column headers will sort the entire table, a small arrow will appear to indicate the direction of the sort.

You can also right click any column and select the sort type from the menu that appears.

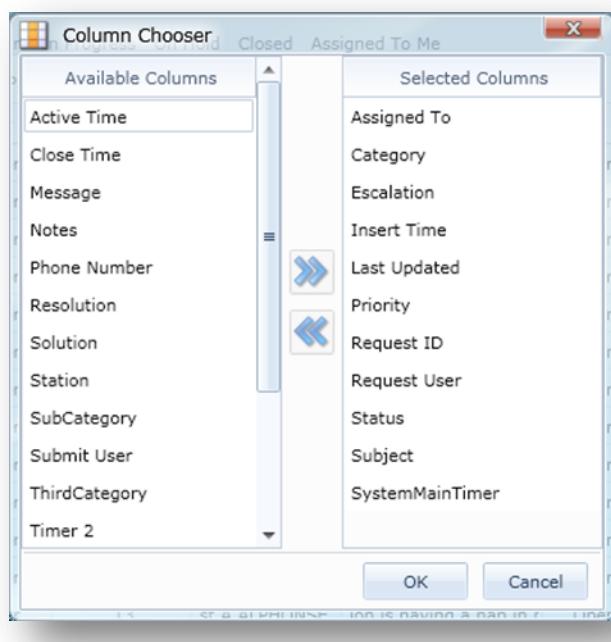


SR Table Column Order

You can change the position of columns by dragging the column header to a new location.

You can also right click any column header and select the appropriate option from the menu that appears.

SR Column Chooser



The initial table is formatted to show the 'headline' information about each Service Request. However, this can be customised to your own personal requirements by using the Column Chooser system. To start the chooser, right click any of the column headers and select Choose Columns from the menu.

Simply select the database elements that you want to be displayed from the Available Column and then press the **>>** button to move them into the Selected Columns table.

To remove columns, select the database element as appropriate and click the **<<** button.

Click **OK** to make the changes.

Your own customised column layout will be saved in the database, and will remain active until you change them.

SR Column Filters

There is also a filter facility to facilitate the quick formatting of your Service Request data view, enabling you to quickly hone in of the data you might be looking for.

The filters are context-related to the column you click, showing you the active data available from that column that you can base your filter on.

To create a filter, select your column and click its  icon.



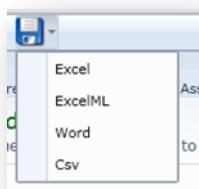
SR Group Headers

You can grab a column header and drag it into the Group Header section. This then orders the service requests based on the values assigned under that column. For instance, by dragging the priority header into the Grouped By area, the table view changes to group the service requests by the various Priority settings.

All	Open	In Progress	On Hold	Closed	Assigned To Me	
Grouped by: Priority						
	Request ID	Request Use	Subject	Category	Status	Assigned To
▼ High						
▲ Low						
	78	08.A.DAVIS	FW: [69] - FW: [65] -	Computer	In Progress	Administrator
	33	supervisor	is after hours test	Computer	Open	08.A.JONES
▼ Medium						
▼ send engineer						
▼ send to suppliers						

You can expand and collapse the grouped record sets by clicking the arrow in the far left-hand column. Horizontal and vertical scroll bars enable you to position the table so you can view that data.

Exporting Your Service Request Tables



You can export any Service Request table view into Excel, CSV or Word format files by selecting the export icon in the toolbar.

Interacting with Service Requests

To open a Service Request, simply double click its entry in the table.

The screenshot shows the 'View Service Request' window for Service Request ID 58. The window has a toolbar at the top with buttons for Add Note, Add Attachments, Print, Close Request, Update Request, Add Resolution, Add Solution, Add Activity, and Add To Knowledge Base. Below the toolbar, there are tabs for Current and History. The main area contains the following fields:

- Request ID:** 58
- Request User:** st.W.ALI
- Subject:** Eleckro Art needed for next week
- Cat | Sub | Third:** Change Requests | Software Installation Request | New Teaching Aid
- Created Date:** 11/03/2010 09:06:51 - 7 minutes ago
- Last Updated:** 11/03/2010 09:06:51 - 7 minutes ago
- Status:** Open
- Priority:** Medium
- Assigned To:** ict.p.derham
- Attachments:** (empty)
- Message:** this software installed and ready for use in the art room for next weeks lessons.
- Assets:** (empty)
- Resolution:** (empty)
- Solution:** (empty)
- Notes:** (empty)
- Activity:** (empty table with columns: Username, Start Time, End Time, Total, Description)

Running across the top of the frame is the Service Manager toolbar which provides access to various functions available.

Looking at the Service Request form,

<i>Request ID</i>	Unique number referencing the Service Request
<i>Request User</i>	Name of the user who raised the Service Request
<i>Subject</i>	Short description of the issue
<i>Cat SubThird</i>	Category tree
<i>Created Date</i>	Time and date the Service Request first entered
<i>Last Updated</i>	Time and date that this Service Request was last updated
<i>Status</i>	Current call status
<i>Priority</i>	Current call priority

<i>Assigned to</i>	Name of the technician with ownership of the call
<i>Attachments</i>	List of files attached to this Service Request
<i>Message</i>	Long description of the issue
<i>Assets</i>	Linkage to asset database items
<i>Resolution</i>	Service Request Resolution
<i>Solution</i>	Service Request Solution
<i>Notes</i>	Notes that have been added to the Service Request
<i>Activity</i>	Planned activities associated with the Service Request.

Service Request Notes

Once a Service Request has been assigned to you, it is important that any and all actions taken to resolve the issue are documented. This is good practice, and it is important because someone else might have to take over responsibility at some stage. Rather than starting from scratch, your notes will provide insight to the current state of progress.

Notes also provide a convenient mechanism to document processes that you would like the Service Manager requesting user to carry out. This might be to follow instructions, or to provide you with more information.

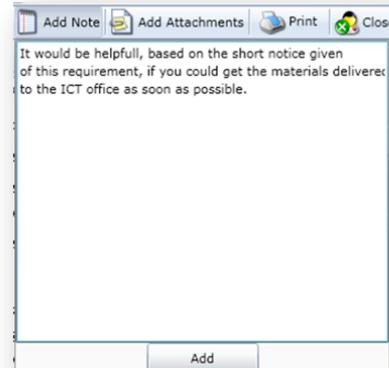
Notes attached to Service Requests can be added by the person who raised the call, the Service Manager administrator, and of course yourself, the service responder.



To add a note, simply click the button in the toolbar and enter the message in the text box that appears. When finished, click the **Add** button.

It should be pointed out that once a note has been added to a service request, it cannot be deleted or edited, it becomes a permanent record.

As service technicians you should write notes in a professional way and keep focused on the issue at hand. Once you hit the add button the note is permanently linked to the service request and you cannot change it - so (for example) personal comments about users or colleagues are unwise!



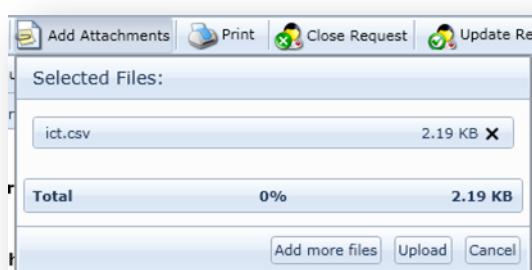
Whenever a Service Request is modified, two things happen. Firstly the history log is updated, and we will

look at this later. The second is that a notification is sent to the requesting user by email.

If the end-user updates the service request, an email is sent to the assigned technician informing that the request has been updated.

Service Request Attachments

Attachments allow both sides to attach files directly to the Service Request. From the end user's point of view they could attach screenshots of the issue they are having, which can be useful in terms of understanding error messages. Equally, as technicians you might like to send the requestor a diagnostic utility to use.



To add files, click the **Add Attachments** button and then browse for and select the file that you want. If you need to attach more files, click the **Add more files** button.

When you have made your selections, click the **Upload** button.

After the files have been uploaded, the files will appear under the attachments field within the service request.

Attachments: conf.adm (39.33 KB) ict.csv (2.19 KB) wuau.adm (53.16 KB) admfiles.ini (81 Bytes) cse.adm (13.05 KB)

You can open and save these attached files by double clicking them and selecting the appropriate option.

Service Request Activities

Activities provide a method by which technician resources can be allocated to tasks that are specific to the Service Request. The Service Manager Administrator uses the system to book and schedule activities for the support desk technicians. These activities then become linked to the Service Request permanently.

Activity:	Username	Start Time	End Time	Total	Description
	ict.e.jenkins	12/03/2010 08:30	12/03/2010 12:30	4.00	Install the Elkro A in the Art Departr on the Amin desk
				TOTAL 4.00	

Service Request Resolution

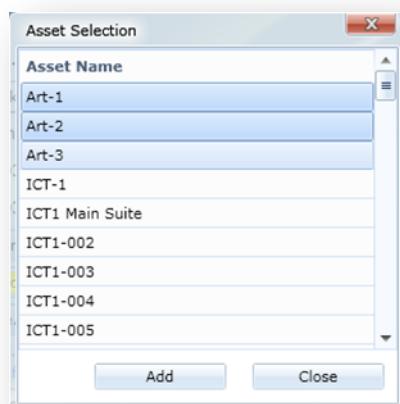
The Service Request Resolution is used to document how the issue was resolved. You should try and avoid simple one word answers, as this somewhat undermines one of the main purposes of Support Manager, which is to provide a repository of knowledge to ensure that similar issues can be resolved quickly.

You need to remember that whilst resolving a particularly difficult issue, the next time it occurs the task may well be allocated to a less knowledgeable technician, and it is your notes about how to resolve such issues that will be of immense help.

Service Request Solution

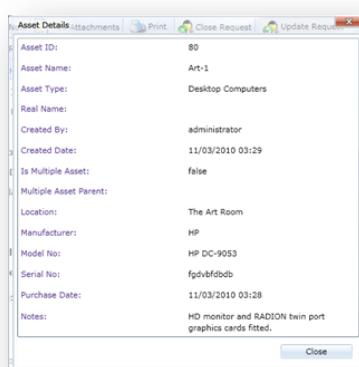
The Resolution and Solution are, on the face of it, somewhat similar, but there is an important difference: the solution would normally be published to the original requestor, but the resolution is hidden from the requestor. This is because the resolution will often contain more technical or complex information, or more high-level information which may not be relevant to them.

Service Request Assets



You can tag service requests directly to individual assets held within the CSE Asset Manager database. Simply click the **Add Asset** button and select the asset from the list that appears.

To remove assets, select from the list and press the **Remove Asset Button**.



If you want to view details of individual assets, simply double click the entry in the table.

This expands and displays the record relating to the machine.

Changing Service Request Data

Much of the data contained within a Service Request cannot be changed once entered. This includes the following data fields,

- *Request ID*
- *Created Date*
- *Last Updated*
- *Attachments (you can add new attachments)*
- *Message*
- *Notes (you can add a new note)*
- *Resolution (you can add a new resolution)*
- *Solution (you can add a new solution)*

Resolution and Solution fields can contain multiple entries, which may seem strange at first. However, ICT issues have a habit of returning, and as a result your end users can reopen any of their previously raised Service Requests. As a result you may have to re-visit and re-investigate certain issues and modify your resolution and solutions accordingly.

It may seem a little arbitrary to not allow you to edit existing fields: however, to allow you to do this would reduce the effectiveness of the system in documenting the process of resolving an issue.

Service Manager is there to help you to do your job more efficiently. It also provides a record of the work you have personally carried out when resolving an issue. In some respects it protects you as it lists the processes and procedures that you followed to eventually come to a solution.

However, there are fields within the Service Manager that you *can* change. These include,

Changing the Request User

Although it is unlikely that you will need to change the requesting user very often, there may be circumstances where you need to do so.

If the requesting user leaves or is off sick for a long period of time, the Service Request can be allocated to a different user.

This is important as the only people who can see a Service Request are the requestor, the assigned technician and the Service Manager Administrator.

Changing the request user allows a different member of staff to continue to interact with the process.

To change the Request User, click the **Change** button and select the new user from the list that appears. When you do so, the Last Updated field changes to record the time and date the record was updated.

Changing the Subject

The Subject field is designed to provide a short description of the issue at hand. It is possible that the end user has entered a description that is incorrect or possibly unclear and confusing. As this field is used to attract the Service Manager administrator and technician's attention, it may need altering in order to describe what the true issue is.

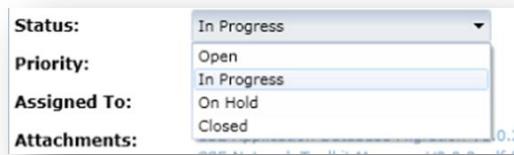
You can click the Subject field text box and edit and change the text.

To save your changes you must then click the **Update Request** button in the toolbar. When you do so, the Last Updated field changes to record the time and date the record was updated.

Changing the Status

You can change the requests Status.

When Requests are entered by users, they are given the status of OPEN. Calls are then assigned to technicians, either manually by the Administrator or automatically by predefined routing rules or SLAs.



When you first open a request to look at it, there is a good chance that it will be OPEN, if you start work on the call you should set the status to IN PROGRESS. This signals that someone is actually looking at the service request and doing something about it.

If for some reason you can't continue with processing the request, you can put it ON HOLD. This generally stops the system timer clocks. ON HOLD usually means that you are waiting for external assistance or approval from a higher authority (such as signing off for an engineer to attend site).

Finally, when the issue has been satisfactorily resolved, and the end user is happy with the solution given, the request can be CLOSED.

Changing the Priority

The service request's priority can be changed. This might be because the end user selected the wrong level when entering the request.

But you equally might feel too high a priority was set initially, and choose to lower its value.



There are possible implications of changing the request's priority level that you need to be aware of. The priority value is one of the fields that your Service Manager Administrator can use as an SLA and routing trigger.

It is possible for you to change a service request's priority and then find that it had been automatically re-routed to a more senior technician for resolution.

Keeping Track of Your Requests

You can use the Service Manager portal to keep track of your assigned Service Requests and you can access the portal anywhere on the network by logging into a station and visiting the support portal web site.

Because the system is completely web-based, you could even access it externally if the router and firewall are set to enable this.

The system will also notify you by email if of any of your assigned requests are updated, or if any new ones have been added to your work list. Remember that the Service Request can be changed and updated by you, the original requester and, of course, the Service Manager administrator.

Notifications are two way - any changes you make to a service request will also result in notifications being sent to the original requestor.

Finally, if the service request is automatically escalated because it triggered an SLA, the Service Manager administrator will be sent an email notification.

In the future the notification system will be extended to support instant messaging and SMS technologies.

Service Request History

Every single transaction that takes place with an individual Service Request is tracked and recorded in the database. This is called the Requests History and it can be examined by clicking the Requests History Tab.

Any actions made by any user will be logged so that you can audit the actions taken at every step of the process,

History for Service Request ID = 1						
TimeStamp	Version	Status	Assigned To	Priority	Reason	
01/06/2010 08:15:57	1	Open	Supervisor	Low	New Service Request Created	
01/06/2010 08:38:07	2	Open	Supervisor	Low	Notes Added by Supervisor	
01/06/2010 08:38:37	3	Open	ict.e.jenkins	Low	AssignedTo Changed, by Supervisor	

Service Request Notifications

As with the service request transaction history, the system automatically logs all automatic emails that have been generated by the request. To see these simply click the Notifications tab.

Complete details are logged for all notifications sent out, including who the emails were sent to and the complete message.

Notifications for Service Request ID = 1					
DateSent	Type	TemplateUsed		AddressFrom	AddressTo
01/06/2010 08:17:40	EMAIL	On New Service Request - Admin		BLS-Support@cse-net.co.uk	Administrator@n
01/06/2010 08:17:46	EMAIL	On New Service Request - Request User		BLS-Support@cse-net.co.uk	
01/06/2010 08:38:07	EMAIL	On Service Request Change - Admin		BLS-Support@cse-net.co.uk	Administrator@n
01/06/2010 08:38:13	EMAIL	On Service Request Change - AssignedTo		BLS-Support@cse-net.co.uk	
01/06/2010 08:38:13	EMAIL	On Service Request Change - RoutedTo		BLS-Support@cse-net.co.uk	Administrator@n
01/06/2010 08:38:19	EMAIL	On Service Request Change - Request User		BLS-Support@cse-net.co.uk	
01/06/2010 08:38:37	EMAIL	On Service Request Change - Admin		BLS-Support@cse-net.co.uk	Administrator@n
01/06/2010 08:38:43	EMAIL	On Service Request Change - AssignedTo		BLS-Support@cse-net.co.uk	ict.e.jenkins@nib
01/06/2010 08:38:48	EMAIL	On Service Request Change - RoutedTo		BLS-Support@cse-net.co.uk	Administrator@n
01/06/2010 08:38:54	EMAIL	On Service Request Change - Request User		BLS-Support@cse-net.co.uk	

Timers			
Timers for Service Request ID = 1			
Timers Last Updated : 01/06/2010 08:45:11			
ID	Timer Name	Timer Value	Timer Action
1	SystemMainTimer	0 day(s) 0 hr(s) 24 min(s) 59 sec(s)	SystemStart
2	Time to Repair	0 day(s) 0 hr(s) 24 min(s) 59 sec(s)	ManualStart
3	Time to Respond	0 day(s) 0 hr(s) 24 min(s) 59 sec(s)	SystemStart
4		0 day(s) 0 hr(s) 0 min(s) 0 sec(s)	None
5		0 day(s) 0 hr(s) 0 min(s) 0 sec(s)	None

Service Request Timers

The final tab allows you to see the timers applied to this service request. You can see the elapsed times recorded and whether the time is running or stopped.

You can manually stop or start every timer in the list with the exception of the main system timer. You can do this by double clicking the timer action icon.

The icon describes the action that is possible.



STOP the timer.



START the timer.

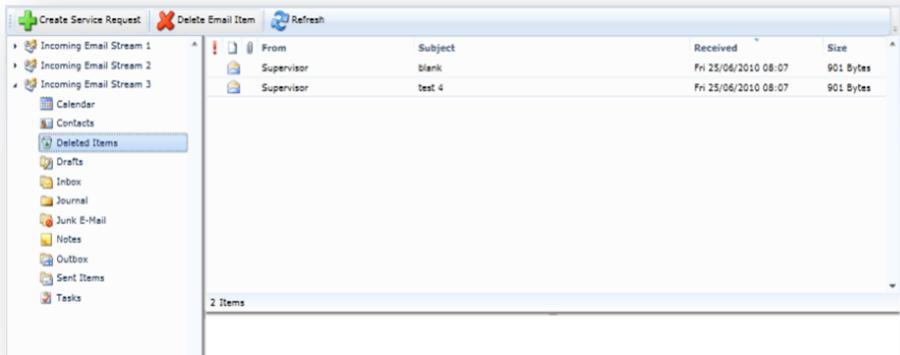
Service Request Email

This function is to enable you and your technicians to manage the in-flow of emailed service requests. By default, Service Manager administrators have full control and management rights over all incoming email channels. Optionally technicians can also be allowed to manage incoming email channels

The system can support multiple incoming email channels. This gives you the flexibility to publish several addresses to your end users and to handle each stream separately as its own entity. You could publish an address for your students to use, allowing them to report issues that affect them directly, rather than reporting issues to staff and getting them to log the requests on their behalf.

Usually, emails that come into the service desk can be handled automatically and this is certainly the ideal method of operation. However, the system is designed to be flexible and you can specify certain rules on how emails are handled by the system. These rules might result in messages being held within the mailbox and therefore not processed. This interface provides you, and designated technicians, access to the incoming mail boxes so that the message queues can be handled manually. This allows emails that fall outside your automated handling process to be reviewed and processed as required.

Messages that remain in the inbox are either waiting to be processed, or have been blocked somehow from being automatically processed. This may be by design, since the administrator can filter out messages based on the contents of the subject field, so any messages you find in the inbox have probably been blocked. You should look at these and either pass them for inclusion into the database or manually delete them. Remember, It is quite possible for these incoming email streams to receive spam, just like any other email account.



In the example above you can see three incoming email streams. The interface presented closely matches the standard email interface that you will be familiar with, but in this case we can see that there are two messages in the Deleted Items folder. These are emails that have already been processed and automatically entered into the database as service requests.

If you see an email message that is obviously spam or is unwanted, highlight it and click the Delete Email Item button in the tool bar. If, however, there is an item that has not been processed because an administrative filter has blocked it, you can read the email's contents and then optionally add it into the service request database by clicking the Create Service Request button and filling in the normal Service Request form.

Finally, the refresh button will re-scan the input mail boxes, picking up any newly-received email messages.

Appendix A – Database Tags

<code> \${SRID}</code>	The service request identifier.
<code> \${Subject}</code>	The subject of the service request.
<code> \${Description}</code>	The description of the service request.
<code> \${ModifyUser}</code>	The user who modified the service request.
<code> \${Category}</code>	The category of the service request.
<code> \${SubCategory}</code>	The SubCategory of the service request.
<code> \${ThirdCategory}</code>	The ThirdCategory of the service request.
<code> \${AssignedTo}</code>	The user the service request is assigned to.
<code> \${Priority}</code>	The priority of the service request.
<code> \${Status}</code>	The status of the service request.
<code> \${RequestUser}</code>	The user who requested the service request.
<code> \${Solution}</code>	The solution to the service request.
<code> \${Resolution}</code>	The resolution of the service request.
<code> \${Notes}</code>	The notes written in the service request.
<code> \${LinkToAttachments}</code>	Creates a link to download the files attached to the service request.
<code> \${IsAfterHours}</code>	Returns 'true' if the notification is sent outside operating hours.
<code> \${IsNewSr}</code>	Returns true if this is a new service request.
<code> \${IsSRClosed}</code>	Returns 'true' if this service request is closed.
<code> \${CloseTime}</code>	The time the service request was closed.
<code> \${RoutedTo}</code>	Shows to whom the service request is routed.
<code> \${LinkToSR}</code>	Creates a link to the service request.
<code> {Customer}</code>	The customer name of service request.

<code> \${RequestUserPriEmail}</code>	The request user's primary email address.
<code> \${RequestUserMobile}</code>	The request user's mobile number.(SMS)
<code> \${SubmitTime}</code>	The time the service request was submitted.
<code> \${SubmitUser}</code>	The user who submitted the request.
<code> \${UpdateTime}</code>	The date and time the service request was modified.
<code> \${Version}</code>	The service request version number.
<code> \${CustomField1Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField1Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField2Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField2Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField3Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField3Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField4Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField4Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField5Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField5Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField6Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField6Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField7Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField7Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField8Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField8Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField9Name}</code>	The name of the custom field associated with the service request.

<code> \${CustomField9Value}</code>	The value of the custom field associated with the service request.
<code> \${CustomField10Name}</code>	The name of the custom field associated with the service request.
<code> \${CustomField10Value}</code>	The value of the custom field associated with the service request.
<code> \${TimersUpdated}</code>	The date and time the timers were last updated for the service request.
<code> \${Timer1Name}</code>	The name of the timer associated with the service request.
<code> \${Timer1Value}</code>	The value of the timer associated with the service request.
<code> \${Timer1Code}</code>	The code of the timer associated with the service request.
<code> \${Timer2Name}</code>	The name of the timer associated with the service request.
<code> \${Timer2Value}</code>	The value of the timer associated with the service request.
<code> \${Timer2Code}</code>	The code of the timer associated with the service request.
<code> \${Timer3Name}</code>	The name of the timer associated with the service request.
<code> \${Timer3Value}</code>	The value of the timer associated with the service request.
<code> \${Timer3Code}</code>	The code of the timer associated with the service request.
<code> \${Timer4Name}</code>	The name of the timer associated with the service request.
<code> \${Timer4Value}</code>	The value of the timer associated with the service request.
<code> \${Timer4Code}</code>	The code of the timer associated with the service request.
<code> \${Timer5Name}</code>	The name of the timer associated with the service request.
<code> \${Timer5Value}</code>	The value of the timer associated with the service request.
<code> \${Timer5Code}</code>	The code of the timer associated with the service request.